DISSERTATION ON

A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING REHABILITATION AMONG PATIENTS WITH RHEUMATOID ARTHRITIS IN RHUEMATOLOGY WARD AT RAJIV GANDHI GOVERNMENT GENERAL HOSPITAL, CHENNAI-03.

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"A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING REHABILITATION AMONG PATIENTS WITH RHEUMATOID ARTHRITIS IN RHEUMATOLOGY WARD AT RAJIV GANDHI GOVERNMENT GENERAL HOSPITAL, CHENNAI-03."

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CERTIFICATE

This is to certify that this dissertation titled **"A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING REHABILITATION AMONG PATIENTS WITH RHEUMATOID ARTHRITIS IN RHEUMATOLOGY WARD AT RAJIV GANDHI GOVERNMENT GENERAL HOSPITAL,CHENNAI-03"**is a bonafide work done by Ms.V.MUTHULAKSHMI, M.Sc(N)II year student, College of Nursing, Madras Medical College,Chennai-03 submitted to The Tamil Nadu DR.M.G.R Medical University, Chennai. In partial fulfillment of the requirement for the award of the degree of Master of Science in Nursing, Branch – I Medical Surgical Nursing, under our guidance and supervision during the academic period from2016 – 2018.

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ABSTRACT

INTRODUCTION: Rheumatoid arthritis is a chronic inflammatory joint disease, which can cause cartilage and bone damage as well as the disability and it is not a hereditary disease. It can be develop at any age, but more commonly between the age group of 20 to 60 years. Rheumatoid arthritis cannot be cured, but people can help to adopt the self-management techniques and maximize the quality life. So the study was conducted to assess the effectiveness of structured teaching programme on knowledge regarding rehabilitation among patients with rheumatoid arthritis in rheumatology ward at Rajiv Gandhi Government General Hospital, Chennai 03.

OBJECTIVE: To assess the level of knowledge regarding rehabilitation among patient with rheumatoid arthritis ,to determine the effectiveness of structured teaching programme on knowledge regarding rehabilitation among patients with rheumatoid arthritis, to determine the association between the selected variables and posttest knowledge regarding rehabilitation among patients with rheumatoid arthritis.

MATERIALS AND METHODS: A Pre–experimental, one group pretest, posttest design was conducted .A total of 60 samples were selected by using non probability purposive sampling technique. Data were collected from the Rheumatoid arthritis patients using a semi-structured questionnaire before and after the implementation of structured teaching program. The data were tabulated and analyzed by descriptive and inferential statistics.

RESULTS: The study results shows, there was a significant difference between the pretest and posttest level of knowledge regarding rehabilitation among patients with rheumatoid arthritis. The obtained t-value (27.55) was greater than the table value at 0.05 level of significance. So the study concluded the structured teaching programme was effective($p \leq 0.001$) so the level of knowledge was improved regarding rehabilitation among patients with rheumatoid arthritis.

Keywords: Rheumatoid arthritis, Rehabilitation, STP.

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LIST OF ABBREVIATION

S.NO	ABBREVIATION	EXPANSION
1.	RA	Rheumatoid arthritis
2.	WHO	World health organization
3.	RGGGH	Rajiv Gandhi Government General Hospital
4.	DF	Degrees of Freedom
5.	SD	Standard Deviation
6.	P	Significance

CHAPTER -I

INTRODUCTION

Uh, I got into a cage match with my immune system, and my immune system seems to have won.

-Rheumatoid arthritis Guy's Quote of the year 2009.

Normally, the defence mechanism of the body in which an immune response is mounted only against foreign (non-self) antigens, but occasionally the body fails to recognise its own tissues and attacks itself [1]. The abnormal condition in which the body reacts against constituents of its own tissues is called as autoimmunity [2].

Development of autoimmunity may be initiated by microbial infection, possibly by viruses, in genetically susceptible people. Antigen/antibody complexes (rheumatoid factors) are formed and are often found in the blood and synovial fluid (seropositive Rheumatoid Arthritis). In most sufferers, the antibody can be detected in the blood it is called rheumatoid factor. The antibodies bind to the synovial membrane, leading to chronically inflamed joints that are stiff, painful and swollen[3].

Rheumatic diseases are comprised of autoimmune and inflammatory disorder have been called "the primary crippling diseases". They are the most prevalent chronic condition in the US and a leading cause of disability[4].

The term arthritis literally means "inflammation of a joint" but arthritis is actually a collection of more than 100 related, but distinct, conditions. The cause of Rheumatoid arthritis is unknown, but it may result from a combination of environmental, demographic, infections and genetic factors[5]. Socioeconomic,

psychological, and lifestyle factors (e.g. tobacco use; main environmental risk) may influence disease outcome [6]. Any influence disease outcome.

The first example of rheumatoid arthritis portrait was by Justus van gent showing federicoda montefeltro who died in 1482, marguerite garnier was the first patient by landre-beauvais of Paris on3rd of august, 1800 .in 1859, sir Alfred Baring Garrod coined the name rheumatoid arthritis.

According to **Hicking** and **Golding (1984),** it is a common disease which appears to have a worldwide distribution .it is a chronic, systemic, articular, inflammatory connective tissue disorder affecting mainly the small peripheral joints in a pattern of symmetric distribution

Rheumatoid arthritis is an inflammatory condition with widespread synovial joint involvement. It is the most common form of chronic polyarthritis, and although it is a systemic disease, it predominantly affects peripheral joints. Persistent synovitis leads to joints destruction, which results in long-term morbidity and increased mortality. Its aetiology remains unknown. The established disease is distinguished from other forms of arthritis by multiple criteria's; the set agreed by the American College of Rheumatology in 1987 is usually used.

After the age 55 years, the prevalence rates for men and women are estimated to be 2% and 5%, respectively. RA occurs worldwide and affects all racial and ethnic groups. It can occur at any time of life, but its incidence tends to increase with age, peaking between the fourth and sixth decade [3]. The incidence of RA ranges from around 20-300 per 100,000 adults per year [7]

Rheumatoid arthritis occurs globally and affecting 0.5%-1% of population all over the world. The incidence and prevalence of Rheumatoid arthritis generally rise with increasing age until about age 70 years, when they start to decline. Around twice as many women as men are affected. The incidence of Rheumatoid

arthritis in populations of northern European origin is 20-30 per 100,000 per year. The estimated prevalence of RA in developing countries is variable studies from Nigeria and Indonesia showed lower prevalence than the reported from the western. While the prevalence of RA in India is about 5% of the population.

Worldwide prevalence is approximately 1%. Its incidence and prevalence is more in developed countries and less in developing countries except India. There is higher incidence if we go from south to north Europe. Prevalence in developing countries is 0.1 -0.5%. But in India, the prevalence of rheumatoid arthritis is 0.75%, is similar to the developed countries [8]. The most reliable estimates of incidence, prevalence and mortality in rheumatoid arthritis are those derived from population based studies.

1.1. NEED FOR THE STUDY

Health is wealth Imogene king defined, Health as a dynamic state in the life cycle of an organism that implies continuous adaptation to stresses in the internal and external environment through optimum use of ones resources to achieve maximum potential for daily living

A physically active individual lives much healthier and active life than people who are physically inactive. This is true for everyone but especially for people with rheumatoid arthritis. Rheumatoid Arthritis is a chronic, systemic, articular, inflammatory connective tissue disorder affecting mainly the small peripheral joints in a pattern of symmetric distribution[9]. Worldwide, the annual incidence of rheumatoid arthritis is approximately 3 cases per 10,000 population, and the prevalence rate is approximately 1%, increasing with age and peaking at age 35-50 years [9].

In 2007, rheumatoid arthritis affected 1.3 million US adults down from the estimate of 2.1 million for 1995[10]. In North Europe, the prevalence rate of RA in

England, Finland, Sweden, Norway, Netherlands are 0.8–1.10, 0.8, 0.5–0.9, 0.4–0.5, and 0.9 respectively. In South Europe, countries like France, Italy, Greece the prevalence rate of RA are 0.6, 0.3, and 0.3-0.7 respectively. In Asia, countries as Japan, China, Indonesia, Philippines have the rates as 0.3, 0.2-0.3, 0.2-0.3, and 0.2respectively. Whereas in the Middle East the prevalence rates of RA in Egypt, Israel, Oman, Turkey are 0.2, 0.3, 0.4, 0.5 respectively [10].

According to WHO has stated in Community oriented program from control of rheumatic diseases Survey done on a study population Bhigwan village, India in 1996 showed the RA prevalence in males and females per 100000 to be 133.4 and 800 respectively[11].

It is now considered as a malignant disease and with increase mortality and morbidity and poor prognosis. Life expectancy decreases by 3-10 years according to severity and age of onset of disease. It is debilitating disease and limit the patient daily activities.

Dr. Anand Malaviya, who is India's foremost expert on the disease of Rheumatoid Arthritis, that this is a complicated disorder in Asia. He further stated that in India alone, approximately10 million people are affected with rheumatoid arthritis. There is a need to generate awareness among people to control this disease[12].

Physical activity is beneficial for arthritis management is a key self-management strategy for persons with arthritis and is proven to reduce pain and improve function and quality of life, yet data shows 44% of people with arthritis are physically inactive[12].

Rehabilitation is a concept, not a place, and should begin the first day a person is diagnosed with a disorder that can result or has resulted in functional

limitation [13]. The rehabilitation management of individuals with rheumatoid arthritis is imperative to decrease the potential long-term disabilities [14].

The unique role of the nurse for these clients is one that assumes accountability and responsibility for guiding and directing the client through the health care maze. The nurse can provide a sense of consistency, hope, and reassurance that the client can learn to cope with, and positively adapt to, the demands of a chronic illness. Clients with arthritis need the nurse's expertise to teach them how to explore new self-care strategies so successful adaptation to the disease is a reality [15].

Rheumatoid Arthritis cannot be cured, but people can be helped to adopt self-management technique and changing of lifestyles will reduce disease symptoms to some extent and maximize the quality of life. With this optimistic views the investigator rightly felt that, appropriate and adequate information should be delivered to the RA patients about various aspects of rehabilitation on rheumatoid arthritis.

Meanwhile, information by Arthritis Research U.K. published in 2014 showed that around 400,000 adults in the U.K. already have rheumatoid arthritis, with 20,000 new patients being diagnosed every year.

Bandura A (1999) Mentioned that patient education on rehabilitation, emphasises that patient behavioural changes can improve their health status and that education is more likely to succeed if, it is underpinned by a proven theory such as self-efficiency[16].

Carol devis (2005) stated that educating the patients on their condition is an important part that helped in changing the life style.

In 2016, Glenn Frey, co-founder and front man of the band The Eagles passed away at age 67 due to complications from rheumatoid arthritis, acute ulcerative colitis, and pneumonia. But what ultimately played a part in his untimely demise was the rheumatoid arthritis medication he was using.

In Rajiv Gandhi Government Hospital about 500 patients with rheumatoid arthritis every week and approximately 10,000 patients in attending outpatients departments .moreover ,approximately 7000 cases get admitted and diagnosed with rheumatoid arthritis in patients department with some manifestations ,among them both female and male patients are in very high rates.

Patient education programme on rehabilitation for rheumatoid arthritis patients is an essential part of quality patient care today. For the diagnosis and therapeutic regimen to be beneficial, patients must be informed about their own health and motivated to share the responsibility of it.

A successful patient education programme for rheumatoid arthritis program for rheumatoid arthritis patients would be one that meets patients need for education on rehabilitation and reducing the risk of disability and complications

So far no study had been done by the nursing personnel regarding rheumatoid arthritis rehabilitation at rheumatology in patient, Government General Hospital, Chennai-03.

The investigators decisions about selecting this topic for the study out of her own experience during her practice in the field of nursing she found that many times patients were admitted with active infection and deformity, they were not aware of the rehabilitative activities to be followed the patients expressed that they need information about illness, pain relief, exercise, joint protection.

So the investigator felt the need to conduct a study on rehabilitation for rheumatoid arthritis patient.

1.2. PROBLEM STTATEMENT

"A Study to assess the effectiveness of structured teaching program on knowledge regarding rehabilitation among patients with rheumatoid arthritis in Rheumatology Ward at Rajiv Gandhi government general hospital, Chennai -03".

1.3. OBJECTIVIES

1. To assess the level of knowledge regarding rehabilitation among patient with rheumatoid arthritis.
2. To determine the effectiveness of structured teaching programme on knowledge regarding rehabilitation among patients with rheumatoid arthritis.
3. To determine the association between the selected variables and post test Knowledge regarding rehabilitation among patients with rheumatoid arthritis.

1.4. OPERATIONAL DEFINITION

ASSESS

It refers to gathering the information on knowledge regarding rehabilitation among patients with rheumatoid arthritis.

EFFECTIVENESS

It refers to the process of evaluating the outcome of structured teaching program and the knowledge gained on rehabilitation those who are all affected with rheumatoid arthritis.

STRUCTURED TEACHING PROGRAM

It refers to systematically organized, structured teaching program on their medications, heat and cold therapy diet, rest and exercises joint care and life style modifications, stress reduction and coping sexual activities, adherence to therapeutic regimen and follow up. It helps to imparting knowledge to the patients regarding rheumatoid arthritis rehabilitation in an organized manner using teaching aids.

KNOWLEDGE

It refers to the rheumatoid arthritis patient's awareness on rehabilitation for the prevention of further disabilities and complications.

REHABILITATION

It involves the selective practices adopted by rheumatoid arthritis patients to lead near normal life programme on their medications, heat and cold therapy ,diet, rest and exercises, joint care and life style modifications ,stress reduction and coping sexual activities ,adherence to therapeutic regimen and follow up.

PATIENTS

Individuals on who are diagnosed as rheumatoid arthritis on treatment needs a betterment in day to day activities of living.

RHEUMATOID ARTHRITIS

Rheumatoid arthritis is chronic, systemic, articular, inflammatory disease of the synovial membrane characterized by pain, swelling, stiffness and loss of functions in the joints.

1.5. ASSUMPTION

1. Level of knowledge about rheumatoid arthritis rehabilitation can be measured by structured interview.
2. Awareness of rehabilitation among rheumatoid arthritis patients can be strengthened through structured teaching program.
3. Adequate knowledge on rehabilitation in rheumatoid arthritis patients reduce the complication.

1.6. HYPOTHESIS

1. There is a difference in the distribution of knowledge on various aspects of rheumatoid arthritis rehabilitation before and after structured teaching program.
2. There is significance association between knowledge and demographic variables of rheumatoid arthritis patients.

1.7. DELIMITATIONS

- Data collection period for 4 week
- The study is limited to only 60 samples
- The study was limited to only one hospital, Institute of Rheumatology ward at Rajiv Gandhi Government General Hospital,Chennai-03.

1.8. CONCEPTUAL FRAMEWORK

The conceptual framework for this study was derived from system theory Ludwig von Bertalanffy (1968) It serves as model for viewing people as interacting with Environment, According to the general system theory for survival, system must receive certain of matter, energy and information from the environment. The system continuously monitors itself environment to guide its operations feedback may be positive or neutral.

Input

In put it refers to the security phase where a structured teaching programme was given knowledge regarding rehabilitation among patient with rheumatoid arthritis on their demographic variables age, sex, religion, marital status, educational status, occupational status, type of family, monthly income, duration of illness residency.

Throughput

In this study, input refers to the existing knowledge of rehabilitation among patients with rheumatoid arthritis on their medications, heat and cold therapy, diet, rest and exercises ,joint care and life style modifications ,stress reduction and coping sexual activities ,adherence to therapeutic regimen and follow up.

Output

After processing the input, the system returns the output to the environment in the form of practicing in their daily activities, in this study, output was expected as gain of knowledge regarding rehabilitation among patient with rheumatoid arthritis.

Feedback

Feedback is the environment response of the system .the feedback is the process whereby the output of the system is redirected to the input of the same system .A fairly low feedback May be neutral, positive or negative .By this method, the negative and neutral output could be rectified in to positive gain.

CHAPTER II

REVIEW OF LITERATURE

The primary purpose of reviewing relevant Literature is to gain a broad background or understanding of the information that is available related to a problem ,in conducting research the literature review facilities selecting a problem and purpose ,developing a framework and formulating a research plan. Literature review is a key step in research process, Review of relevant Literature is an analysis and synthesis of research sources to generate a picture of what is known about a particular situation and knowledge gaps that exist in the situation .In order to accomplish the goal in the present study, an attempt has been made to review and discuss the Literature

I have reviewed the relevant Literature in support of problem statement of present study. Literature review was carried out in support of effectiveness of structured teaching programme on knowledge regarding rehabilitation among rheumatoid arthritis in terms to reduce the physical disability and to improve the quality of life burden to individual and country

2.1. LITERATURE REVIEW RELATED TO STDUY

SECTION A- Review on knowledge regarding Rheumatoid arthritis

SECTION B-Review on rehabilitation among Rheumatoid arthritis

SECTION C-Review on effectiveness of structured teaching programme on rheumatoid arthritis.

SECTION A – Review on knowledge regarding Rheumatoid arthritis

Ferro (2017) Conducted a study on Rheumatoid arthritis (RA) is a chronic disease characterised by inflammation of the synovial tissue in joints, which can lead to joint destruction. The primary goal of the treatment is to control pain and inflammation, reduce joint damage and disability, and maintain or improve physical function and quality of life. The present review is aimed at providing a critical analysis of the recent literature on the novelties in the treatment of RA, with a particular focus on the most relevant studies published over the last year.

Clin Immunol (2017) conducted a study on Biomarkers in connective tissue disease and concluded that Autoimmune connective tissue diseases are clinically variable, and this review describes select current biomarkers that aid in the diagnosis and treatment of several major systemic autoimmune connective tissue disorders: systemic lupus erythematosus, rheumatoid arthritis, systemic sclerosis, and anti-neutrophil cytoplasmic antibody-associated vasculitis. Newly proposed biomarkers that target various stages in disease onset or progression are also discussed. Newer approaches to overcome the diversity observed in patients with these diseases and to facilitate personalized disease monitoring and treatment are also addressed

Panel et al.,(2017) Conducted a study on Arthritis patient education Arthritis in one of the most prevalent chronic diseases and the number one disabler of the elderly. Even though arthritis is a major cause of morbidity and a contributor to early mortality, relatively few studies have been undertaken to examine effects of arthritis patient education. This review was undertaken to provide a summary of arthritis patient education studies, summarize the effectiveness of arthritis patient education in changing knowledge, behaviour, psychological status, and health status, address critical issues/problems in arthritis patient education study methodology, and suggest guidelines for

future design, implementation, and evaluation of arthritis patient education programs.

Walker,(2017) Conducted a study to reviewed rheumatoid arthritis role of the nurse and multidisciplinary team at the division of accident and orthopedic surgery ,queens medical Centre, Nottingham, Authors concluded that it is imperative that the multidisciplinary team are involved with care to ensure that independence is maintained and function optimized the role of the nurse in the management of rheumatoid arthritis is varied ,ranging from providing specialist advice about how to manage the condition to caring for patients who are having joint replacements as a results of the increased level of pain and damage it can cause

Lu.G. Jiang (2017) Conducted a study to reviewed heat pattern of rheumatoid arthritis in traditional Chinese medicine at institute of basic research in clinical medicine china the research is aimed to explore the distinct molecular signature in discriminating the rheumatoid arthritis patients with traditional Chinese medicine (TCM) cold pattern and heat pattern were included .the result suggest that better knowledge of the main biological process involved at a given pattern in TCM might help to choose the most appropriate treatment

Totoson P.K.Prati (2017)conducted a study on mechanism of endothelial dysfunction in rheumatoid arthritis which shows that patients with rheumatoid arthritis are characterized by the presence of endothelial dysfunction (ED) ,which is recognized as a key event in the development of atherosclerosis by definition, ED is a functional reversible alteration of endothelial cells, leading to a shift of the actions of the endothelium toward reduced vasodilatation, proinflammatory state and proliferative and prothrombotics properties .Although the improvement of endothelial function is becoming an important element of global management of patients with RA in the mechanistic determinants of ED in RA are still poorly understood ,The

present review summarizes the available data on mechanism underlying ED in animal models RA and proposes attractive prospects in order to discover novel therapeutic strategies of RA associated ED

Macfarlane LA,Todd DJ.(2017) Conducted a study on kinase inhibitors the next generation of therapies in the treatment of Rheumatoid arthritis concluded that despites the traditional use of Disease modifying anti rheumatic drugs such as methotrexate and biologic agents to impair disease progression and joint destruction ,an insight in to cellular pathways of inflammation has revealed new therapeutic targets for the treatment of auto immune disease like RA and recommended Janus kinase (JAK),mitogen activated protein kinase (MAPK),and spleen tyrosine kinase (sky)

T.Makelainen,(2016) conducted a study to describe RA patients understanding of their disease and its treatments. The study included 252 RA patients participated in the survey. The knowledge level of the patients and their physical functioning were measured using self-reported Questionnaire and the data's were analyzed using descriptive and non-parametrical statistical method. The results obtained that the total score of patient knowledge Questionnaire ranged from 2 to 29.The patients were knowledgeable regarding the etiology, signs and symptoms, blood test, physical exercise ,facts relating to joint protection, how to use Anti rheumatic drugs and non-steroidal non inflammatory drugs. Among them the young patients, women with long disease duration knew the most. Thus the study concluded stating that RA patient's knowledge of their disease & its treatment varied from poor to good.[15]

Elly M Van Der Wardt, (2016) conducted a study to gain insight into the general public's knowledge and perceptions regarding rheumatic diseases in the Netherlands. A questionnaire was sent by mail to a random sample of 1800 Dutch homes; the response was 658. Questions mainly focused on knowledge, attitudes, behavioral intentions and use of the mass media with regard to rheumatic diseases. The respondents gave the right answer to a mean of 8.2

statements out of 17 true/false statements regarding factual knowledge of rheumatic diseases. Respondents particularly underestimated the prevalence of rheumatic diseases and were unaware of several rheumatic disorders. Thus the study concluded that the public in general do not know very much about rheumatic diseases, but they do have a moderate desire for more information about them.[16]

Barlow, (2016) conducted a study to assess the knowledge in patients with rheumatoid arthritis: a longer term follow-up of a randomized controlled study of patient education leaflets. Despite the wide availability of disease-related leaflets, their impact on patients' knowledge and well-being has rarely been evaluated. A randomized controlled study of a 'Rheumatoid Arthritis' leaflet revealed increased knowledge among the intervention group after 3 weeks. In addition, the leaflet was viewed as a source of reassurance. The purpose of the follow-up study was to determine whether the increase in knowledge was maintained in the longer term and to examine psychological well-being. Eighty-four patients (42 intervention and 42 control) completed the 6 month follow-up. There were no significant changes ($P > 0.01$) in mean outcome measures over the period 3 weeks-6 months for either the intervention or control groups. Patients in the intervention group retained the increase in knowledge observed at 3 weeks.[17]

Puente A.D, Bennel P.H (2016) Conducted a longitudinal population study on incidence of rheumatoid arthritis is predicted by Rheumatoid factor titre. A sample of 2712 pima Indians was observed up to 19 years with biennial examination the population was stratified with rheumatoid factor titre and concluded that the presence of rheumatoid factor for the development of rheumatoid arthritis is a risk factor for the development of rheumatoid arthritis and eventually suggested that rheumatoid factor can be used as a marker for detecting rheumatoid arthritis in the earlier phase.

SECTION B-Review on rehabilitation among Rheumatoid arthritis

Salonen, (2016) A quasi-experimental control group design was employed to evaluate the patient's cognitive and behavioural responses to patient education program. The treatment group increased its cognitive score 22.5% from initial pre-test to long-term follow-up, whereas the control group improved only 5.1% on these questions. Although the control group initially scored somewhat higher on the behavioural measures, it reported a decrease in the performance of self-care activities on the post-test and follow-up.[14]

Rohini Handa, (2014) An experimental study with thirty subjects receiving care at a rheumatology clinic was conducted to examine the effects of self-instruction on learning, satisfaction with teaching approach, and health status of persons with rheumatoid arthritis. Subjects rated self-instruction as an effective teaching strategy in terms of promoting learning about RA and patient acceptability.

Dr.Rajendra Sharma,(2013) A study was performed in 86 patients with rheumatoid arthritis (RA) to assess their health problems, the problems they experience in adhering to health recommendations and the relationships of these problems with self-efficacy and social support. It concluded that to improve the self-management of disability and pain and adherence to health recommendations, patient education should be aimed at strengthening self-efficacy expectations in which social emotional support might be a motivating factor.[15]

Matthias Schneider (2013) A randomized controlled study of a 'Rheumatoid Arthritis' leaflet revealed increased knowledge among the intervention group after 3 weeks. In addition, the leaflet was viewed as a source of reassurance. Patients in the intervention group retained the increase in knowledge observed at 3 weeks. Moreover, there was no evidence of adverse reactions to the leaflet in terms of psychological distress. Leaflets can be effective in promoting long term increase in knowledge.

Dr, Jiri Rada,(2013)A study was conducted on seventy randomly selected Rheumatoid arthritis patients to assess the knowledge regarding rheumatoid arthritis in a rheumatology out-patient clinic of a large teaching hospital. Total scores correlated with years of general education ($P<0.05$) but not with disease duration or age. The study highlights the need for careful individual knowledge assessment by use of tools such as the patient knowledge questionnaire and effective patient education programmes. [16]

Rose Wong, (2013) A study was conducted on 363 participants with Rheumatoid arthritis. Reading ability was assessed and knowledge was assessed using the Knowledge Scale Questionnaire (KSQ).The more literate participants gained more knowledge regardless of the information they were given. They were also significantly less anxious and less depressed. The Arthritis research booklet with or without the mind map was associated with a significant increase in knowledge. Poor readers had poor educational attainment and poor knowledge acquisition. The information on the mind map was not more accessible to them. Different educational strategies will be necessary to educate these patients[17].

EM de Croon, (2012) A study was conducted to examine the efficacy of psychological intervention for rheumatoid arthritis and to determine whether self-regulation intervention demonstrate efficacy superior to that of other psychological treatment. 27 trails gave the conclusion that psychological interventions are beneficial for many patients with rheumatoid arthritis, particularly when it comes to increasing physical activity levels. Intervention technique derived from self-regulation theory appears to play a role in reducing depressive symptoms and anxiety among patient with rheumatoid arthritis. [18]

S Kumar,(2012) A study was conducted in Chennai to assess the oxidative stress status in rheumatoid arthritis by measuring marker of free radical mediated tissue destruction and levels of anti-oxidant. Peripheral blood samples were used for all the assays. Result stated that statistically significant

changes were observed in the levels of vitamin E and erythrocyte sedimentation rate (ESR) in the patient group. Increased oxidative stress status exist, which may lead to connective tissue degradation leading to joint and periarticular deformities in rheumatoid arthritis.[19]

SECTION C- Review on effectiveness of Structured Teaching Programme

Põlluste K. et.al. (2012) a study was conducted on assistive devices, home adjustments and external help in rheumatoid arthritis. To explain the determinants of adaptation with disease and self-management of patients with rheumatoid arthritis (RA) in Estonia, focusing on the use of assistive devices, home adjustments and the need for external help. A random sample (n = 1259) of adult Estonian RA patients was selected from the Estonian Health Insurance Fund Database. The patients completed a self-administered questionnaire, which included information about their socio-demographic and disease characteristics, the costs of care, quality of life, use of assistive devices, home adjustments and the need for external help. Regression analysis was used to analyze the predictors of patient's adaptation with disease and self-management. Twenty-six percent of the respondents used assistive devices, 20% had made home adjustments and 37% needed external help. The study concluded that disability and physical impairment are the most important determinants of the use of various technical aids and home adjustments. These factors, along with the female gender and single status of the patient, predict help-dependence.[18]

Hewlett S.et.al. (2011 a study was conducted on self-management of fatigue in rheumatoid arthritis: a randomized controlled trial of group cognitive-behavioural therapy to investigate the effect of group cognitive behavioural therapy (CBT) for fatigue self-management, compared with groups receiving fatigue information alone, on fatigue impact among people with rheumatoid arthritis (RA).Two-arm, parallel randomized controlled trial in adults with RA, fatigue ≥ 6/10 (Visual Analogue Scale (VAS) 0-10, high bad)

and no recent change in RA medication. Group CBT for fatigue self-management comprised six (weekly) 2 h sessions, and consolidation session (week 14). Control participants received fatigue self-management information in a 1 h didactic group session. Primary outcome at 18 weeks was the impact of fatigue measured using two methods (Multi-dimensional Assessment of Fatigue (MAF) 0-50; VAS 0-10), analysed using intention-to-treat analysis of covariance with multivariable regression models. Of 168 participants randomized, 41 withdrew before entry and 127 participated. There were no major baseline differences between the 65 CBT and 62 control participants. At 18 weeks CBT participants reported better scores than control participants for fatigue impact: MAF 28.99 versus 23.99 (adjusted difference -5.48, 95% CI -9.50 to -1.46, p=0.008); VAS 5.99 versus 4.26 (adjusted difference -1.95, 95% CI -2.99 to -0.90, p<0.001). Standardized effect sizes for fatigue impact were MAF 0.59 (95% CI 0.15 to 1.03) and VAS 0.77 (95% CI 0.33 to 1.21), both in favour of CBT. Secondary outcomes of perceived fatigue severity, coping, disability, depression, helplessness, self-efficacy and sleep were also better in CBT participants. Thus the study concluded that the Group CBT for fatigue self-management in RA improves fatigue impact, coping and perceived severity, and well-being.[19]

Home D.et.al. (2011) conducted a study on the role of early intervention and self-management of Rheumatoid Arthritis. The National Institute of Health and Clinical Excellence issued guidance on the management of RA in adults while the King's Fund and National Audit Office have reported on the services that are available for people with RA. This paper will provide an overview of these reports and their implications for primary care. The role of early identification, referral and diagnosis will be explained as well as the treatment options available. The role of self-management and how community nurses can facilitate self-management will be discussed.[20]

Chiou AF.et.al. (2011) conducted a cross-sectional study on Disability and pain management methods of Taiwanese arthritic older patients to

investigate the prevalence of disability, factors influencing disability and pain self-management techniques employed by older arthritis patients in Taiwan. Disability was found in 11% of Taiwanese individuals diagnosed with either rheumatoid arthritis or osteoarthritis. Those in disability reported more severe disease activity, pain, depression and lower life satisfaction. Hierarchical multiple regression analysis revealed that 31-46% of the total variance of disability could be explained by age, gender, marriage, joint pain score, diagnosis, disease activity, depression and pain management. Patients with rheumatoid arthritis had significantly higher levels of disability, disease activity during the preceding six months, more depression and less life satisfaction than patients with osteoarthritis. Thus the study concluded that higher disability was explained by older age, female, unmarried, diagnosed with rheumatoid arthritis, more joint pain, more disease severity, more depression and more use of pain management strategies in arthritis patients.[21]

Fati Abourazzak.et.al. (2011) conducted a study on Long-term effects of therapeutic education for patients with rheumatoid arthritis. 39 RA patients participated in a 3 day educational programme. Effects were evaluated after 3 yrs in 33 patients comparatively to the baseline based on variables: knowledge of RA, Disease activity(DAS28),functional impairment (HAQ) and quality of life ,Arthritis impact measurement scale 2 (AIMS2),also compared patient knowledge in educational programme participants and in 38 controls with RA. The results stated that patient knowledge was significantly improved compared to baseline than in controls. DAS28 was lower in educational group after 3 yrs. than at baseline with no change in HAQ, AIMS2.Thus the study concluded that the educational programme can produce lasting improvement in knowledge of disease and may help to control the activity of RA.[22]

T.Uhlig.et.al. (2011) conducted a study to determine whether there was a secular change from 1994-2004 among patients within the setting of Oslo Rheumatoid Arthritis Register (ORAR).The Data's were collected from all

living patient in the ORAR by giving a postal questionnaire in 1994, 1996,2001& 2004,including the modified Health Assessment Questionnaire(MHAQ), Arthritis Impact Measurement scale2 (AIMS2) and Visual analogues scale for the assessment of disease severity, pain & fatigue. Mixed model approach was used for longitudinal analysis adjusting for age, sex, and co-morbidity& disease duration. The results were that the health status in the population with RA was consistently improved in all dimensions of health. Thus the study concluded that health status in RA improved from 1994 to 2004, due to better &more aggressive treatment.[23]

T.M.Spigell. (2011) conducted a study to evaluate an inpatient RA patient education program to determine whether patient knowledge improved and whether the improvement persisted after discharge. The patient's knowledge was assessed by a multiple choice and true false test given upon admission, after education and 4 months following discharge. The result was obtained that the treatment group increased their knowledge by 40 %($p<.05$) on post intervention Questionnaire whereas control group had no significant improvement in knowledge. Thus the study concluded that inpatients demonstrated increase in knowledge of physical therapy even they were involved in numerous diagnostic & therapeutic interventions that could have distracted from educational programme.[24]

CHAPTER III

RESEARCH METHODOLOGY

This chapter deals with the research methodology followed "A study to assess the effectiveness of structured teaching programme on knowledge regarding rehabilitation among patient with rheumatoid arthritis in rheumatology ward at Rajiv Gandhi government general hospital, Chennai 03

3.1 RESEARCH APPROACH

A quantitative research approach was used for this study

3.2 RESEARCH DESIGN

Pre experimental design one group pre-test, post-test design was adopted in this study

Group	**Pre test o1**	**Intervention x**	**Post test o2**
Rheumatoid Arthritis patients	**1st day** Assessment on Knowledge regarding rehabilitation among patient with rheumatoid arthritis	**1st day** Administration of structured teaching programme rheumatoid arthritis rehabilitation with help of flash cards ,charts ,booklets	**After 7days** Assessment on knowledge regarding rehabilitation among rheumatoid arthritis

3.3 STUDY SETTINGS

The study was conducted in rheumatology inpatient department Rajiv Gandhi Government General Hospital, Madras medical college Chennai 03 it is the one of the apex institution in south East Asia .This hospital has almost all specialties and super specialties where tremendous education and pioneering research are carried out. The rheumatology department was started during 1972 the rheumatology inpatient department functions on all days including government holidays and Sundays .It is the only unique centre where all the facilities for carrying out important immunological, haematological and biochemical investigations relevant to rheumatology are available. The department has presented more than 100 papers in national and international conferences this department is selected at the international level to conduct the trail on leflunomide which a new drug to be introduced in the market

3.4 DURATION OF THE STUDY

4 weeks (From 02 -01-2018 TO 27-01-2018)

3.5 STUDY POPULATION

Target population

Rheumatoid arthritis patients admitted in the ward at Rheumatology department in Rajiv Gandhi Government General Hospital, Chennai 03.

Accessible population

Rheumatoid arthritis patients available during the period of data collection

3.6 SAMPLE

Rheumatoid arthritis patients who were admitted in rheumatology department

3.7 SAMPLE SIZE: 60 Samples

3.8 SAMPLING CRITERION

3.8.1 Inclusion criteria

- Adults above the age group of 24 years
- Patients who are all available during the study period
- Patients who are willing to participate in the study
- Patients who can speak and understand Tamil and/ English

3.8.2 Exclusion criteria

- Patients who have below the age group of 24 years
- Patients who have not willing to participate in the study
- Patient who have other co morbid illness along with rheumatoid arthritis
- Patients who have sensory deprivation like hearing loss

3.9 SAMPLING TECHNIQUE

Non probability purposive sampling techniques

3.10 RESEARCH VARIABLES

3.10.1. Independent variables: structured teaching programme

3.10.2. Dependent variables: knowledge regarding rehabilitation among rheumatoid arthritis

3.11 DEVELOPMENT AND DESCRIPTION OF THE TOOL

The researcher developed the tool on the basis of objectives of the study. Tool was developed after extensive review of literature from various textbook, journals, internets and discussion and guidance from the experts in the field of nursing and medical .Rajiv Gandhi Government General Hospital and personal experience of researcher in the clinical field and statistician were consulted for the development of tool .the tool was developed English and translated in to Tamil .congruency was maintained in translation.

Tool consists of two sections

Section –A

It deals with the demographic variables of the subject that includes age, sex, religion, marital status, and educational status, and occupational status, monthly income of the family type, duration of illness and area of residence.

Section –B

It consists of multiple choice questions which were prepared to assess the knowledge regarding rehabilitation among rheumatoid arthritis. The question were related to the disease aspects ,medication, heat and cold therapy, diet ,rest and exercise joint care and life style modification ,stress reduction and coping ,sexual activity adherence to therapeutic regimen and follow up.

3.11.1 SCORING INTERPRETATION

An interview schedule was used to assess the knowledge on rehabilitation in rheumatoid arthritis patients .it contains 35 multiple choice questions and scores were divided according to the aspect wise as follows.

The various aspects of rheumatoid arthritis rehabilitation

S.No	Aspects	No.of items
1	Disease condition	5
2	Medication	4
3	Heat and cold therapy	4
4	Diet	3
5	Rest and exercise	5
6	Joint care and lifestyle modification	5
7	Stress reduction and coping	3
8	Sexual activity	3
9	Adherence to therapeutic region and follow up	3
	Total	35

The scores given for rheumatoid arthritis rehabilitation areas follows

For correct answer; 1 score

For wrong answer; 0score

Based on the scores the level of knowledge on rheumatoid arthritis rehabilitation

Inadequate knowledge -less than 40% score

Moderate knowledge -40%-60%score

Adequate knowledge -More than 60% score

3.12.CONTENT VALIDITY

After construction of questionnaire for the study on Assess the effectiveness of structured teaching programme on knowledge regarding rehabilitation among rheumatoid arthritis at Rajiv Gandhi Government General hospital Chennai.03it was tested for its validity.

Validity of the tool was assessed using content validity .content validity was determined by experts from medical and nursing .They suggested certain modification in tool .After the modifications they agreed this tool for assess the effectiveness of structured teaching programme on knowledge regarding rehabilitation among rheumatoid arthritis in rheumatology ward at Rajiv Gandhi Government General Hospital Chennai-03.

3.13.RELIABILITY OF THE TOOL

Reliability of the tool was assessed by using Test –Retest method knowledge score reliability correlation coefficient value was this correlation coefficient is very high and tool is reliable to assess the effectiveness of structured teaching programme on knowledge regarding rehabilitation among rheumatoid arthritis at Rajiv Gandhi Government General Hospital Chennai-03.

3.14.ETHICAL CONSIDERATION

Following submission of the study proposal the permission was obtained from Institutional ethics committee .Permission for conducting the study was obtained from the director of Rheumatology Department at Rajiv Gandhi Government General hospital Chennai 03. Thus the investigator followed the ethical guidelines which were issued by the institutional ethics committee .confidentiality of the results and anonymity were assured to the patients throughout the study period the respect of the patients and family members was maintained

3.15.PILOT STUDY

Pilot study was conducted in selected wards at Rajiv Gandhi Government General Hospital Chennai 03 ,by convenient sampling techniques 10 rheumatoid arthritis patients were selected .pre assessment of the knowledge regarding rehabilitation among rheumatoid arthritis was assessed using knowledge assessment tool and structured teaching programme was given after the pre test ,post assessment was done after seven days using same tool .The study showed feasibility to conduct the proposed study as planned These samples were not included in the main study

3.16 .Data collection procedure

Formal permission was obtained and data was collected from Rajiv Gandhi government general hospital Chennai 03 .The samples were selected by using convenient sampling techniques.

Phase –I: Pre Assessment

The investigator introduced herself and explained the purpose of the study and obtained written consent from organization the patients .All patients were informed about the purpose of the study and their part during the study and how the privacy was guarded Ensured that confidentiality of the study results will be maintained .Freedom was given to the client to leave the study without giving any reasons their routine care was not disturbed .throughout the study period the respect of the patient and family members will be maintained. Demographic and clinical data were collected and knowledge regarding rehabilitation among rheumatoid arthritis were assessed using knowledge assessment tool**.**

Phase II post Assessment

The investigator conducted the post assessment after 7 days using same tool.

3.17.Data entry and analysis

Collected data entered every day in coding sheet .the data were analyzed statistical package for social science

3.17.1.Descriptive statistics

Descriptive statistics is used to describe the basic features of data and to provide simple summaries about the sample used in the study standard deviation, mean deviation are used in knowledge score

3.17.2.inferential statistics

Inferential statistics helps in drawing inferences from data eg. Finding the differences, relationship and association between two or more variables by the help of parametric and non-parametric tests Chi –square test ‘t’ test ANOVA are used in the study.

CHAPTER –IV

DATA ANALYSIS AND INTERPRETATION

This chapter deals with the analysis and interpretation of data collection from 60 rheumatoid arthritis patients admitted in rheumatology ward at Rajiv Gandhi Government General hospital ,Chennai 03 .Statistical procedure enabled the researcher to reduce ,summarize ,organize ,evaluate ,interpret and communicate numeric information .Statistical analysis is a method of reducing quantitative information in a meaningful and intelligible way The analysed data were tabulated and presented according to the objectives and hypothesis

Statistical analysis

- Demographic variables in categories were given in frequencies with their percentage.
- Knowledge score were given in mean and standard deviation.
- Association between demographic variables and post-test knowledge score were analysed using chi-square test.
- Pre test and post-test knowledge score were compared using students paired t-test.
- Pre test and post-test knowledge score were comparing using Mc Nemars test.
- Association between knowledge gain score and demographic variables was analysed using one way ANOVA F-Test / t-test.
- Difference between pre-test and post-test score was analysed using proportion with 95% CI and mean difference with 95%C.
- Simple bar diagram, multiple bar diagram, doughnut diagram, pie diagram and box plot were used to represent the data $p<0.01$ was considered statistically significant .All statistically test are two tailed test.

Table 4.1: Demographic profile of the study participants

DEMOGRAPHIC VARIABLES		No. of Patients	%
Age in years	25-35 years	22	36.67%
	36-45years	25	41.67%
	46-60 years	10	16.66%
	>60 years	3	5.00%
Sex	Male	22	36.67%
	Female	38	63.33%
Religion	Hindu	47	78.33%
	Muslim	4	6.67%
	Christian	9	15.00%
Marital status	Married	53	88.33%
	Unmarried	3	5.00%
	Widow	4	6.67%
	Divorced	0	0.00%
Educational status	No formal education	5	8.33%
	Primary education	34	56.67%
	Secondary education	12	20.00%
	Higher secondary	9	15.00%
Occupational status	Heavy worker	18	30.00%
	Moderate worker	22	36.67%
	Sedentary worker	20	33.33%
Monthly income	< Rs.3000	8	13.33%
	Rs .3001-5000	13	21.67%
	Rs.5001-7000	22	36.67%
	> Rs.7000	17	28.33%
Duration of illness	< 1 year	26	43.33%
	1 -2 years	34	56.67%
	2 -3 years	0	0.00%
	> 3 years	0	0.00%
Type of family	Nuclear family	42	70.00%
	Joint family	28	30.00%
Place of living	Urban	14	23.33%
	Rural	24	40.00%
	Suburban	22	36.67%

Out of 60 study participants 22 members are aged between 25 -35 years,25 members of them are 36 -45 years ,10 members of them are 46-60 years,3members of them >60 years.

Out of 60 study participants 22 members of them are male, 38 members of them are females.

Out of 60 study participants 42 members of them are Hindhu,4 members of them are Muslims ,9 members are of them are Christians.

Out of 60 study participants52 members of them are marries,3 members of them are unmarried ,4members of them are Widow ,none of them divorced.

Out of 60 study participants 5 members of them are no formal education, 34 members of them are primary education, 12 members of them are secondary education, 9 members of them are higher secondary education.

Out of 60 study participants 18 members of them are heavy worker, 22 members of them are moderate worker, 20 members of them are sedentary workers.

Out of 60 study participants 8members of them are <Rs .3000,13 members of them are Rs .3001 to 5000,22 members of them 5001 to 7000 ,17 members of them are > Rs .7000.

Out of 60 study participants 26 members of them are <1year,34 members of them are 1to 2 years ,none of them are 2 to 3 years ,none of them are >3years.

Out of 60 study participants 42 members of them are nuclear family, 28 members of them are joint family.

Out of 60 study participants 14 members of them are urban, 24 members of them are rural, 22 members of them are suburban.

Table 4.2: Pre test percentage of knowledge regarding rehabilitation among patients with Rheumatoid Arthritis

	Domains	No. of questions	Min – Max score	Knowledge Score		
				Mean	SD	% of mean score
1	Disease condition	5	0 -5	2.08	1.52	41.60%
2	Medications	4	0 - 4	1.22	.90	30.50%
3	Heat and cold therapy	4	0 - 4	1.30	1.09	32.50%
4	Diet	3	0 - 3	1.07	.86	35.67%
5	Rest and exercise	5	0 - 5	1.68	1.16	33.60%
6	Joint care and life style modification	5	0 - 5	2.00	1.59	40.00%
7	Stress reduction and coping	3	0 - 3	1.00	.86	33.33%
8	Sexual activity	3	0 - 3	.95	.85	31.67%
9	Adherence to therapeutic regimen and follow up	3	0 - 3	.97	.88	32.33%
	Overall	35	0 - 35	12.27	3.72	35.06%

Table 4.2: Reveals that each domain wise pre-test percentage of knowledge regarding rehabilitation among patient with rheumatoid arthritis. They are having maximum knowledge in **Disease condition** (41.60%) and minimum knowledge score in **Medications** (30.50%).

Table 4.3: Pre test level of knowledge

Level of knowledge	No. of patients	%
Inadequate knowledge	55	91.7%
Moderate knowledge	5	8.3%
Adequate knowledge	0	0.0%
Total	60	100%

Table 4.3: Reveals that the level of pre-test knowledge regarding rehabilitation among patient with rheumatoid arthritis.In general 91.7% of patients are having inadequate level of knowledge score and 8.3% of them having moderate knowledge and none of them are having adequate knowledge score.

Knowledge score interpretation:

Minimum score =0 Maximum score =1 Total questions=35 Total marks= 35

S No.	Grade	Percentage	Marks
1.	Adequate knowledge	76 – 100%	26.26-35.00
2.	Moderate knowledge	50 – 75%	17.6-26.25
3.	Inadequate knowledge	0 – 50 %	< 17.5

Table 4.4: Each post test percentage of knowledge score regarding rehabilitation among patients with Rheumatoid Arthritis

	Domains	No. of questions	Min – Max score	Knowledge score		
				Mean	SD	% of mean score
1	Disease condition	5	0 -5	4.28	.94	85.60%
2	Medications	4	0 - 4	3.22	1.08	80.50%
3	Heat and cold therapy	4	0 - 4	3.27	1.23	81.75%
4	Diet	3	0 - 3	2.35	1.04	78.33%
5	Rest and exercise	5	0 - 5	4.07	1.27	81.40%
6	Joint care and life style modification	5	0 - 5	3.97	1.34	79.40%
7	Stress reduction and coping	3	0 - 3	2.52	.91	84.00%
8	Sexual activity	3	0 - 3	2.33	.91	77.67%
9	Adherence to therapeutic regimen and follow up	3	0 - 3	2.57	.85	85.67%
	TOTAL	35	0 - 35	28.57	2.92	81.63%

Table 4.4: Reveals that each domain wise post-test percentage of knowledge regarding rehabilitation among patient with rheumatoid arthritis. They are having maximum knowledge in **Adherence to therapeutic regimen and follow up** (85.67%) and minimum knowledge score in **Sexual activity** (77.67%).

Table 4.5: Post test level of knowledge

Level of knowledge	No. of patients	%
Inadequate knowledge	0	0.0%
Moderate knowledge	11	18.3%
Adequate knowledge	49	81.7%
Total	60	100%

Table 4.5 : Reveals that the level of knowledge regarding rehabilitation among patient with rheumatoid arthritis after administration of structured teaching programme In general none of the patients are having inadequate level of knowledge score and 18.3% of them having moderate level of knowledge and 81.7% of them are having adequate level of knowledge score.

Table 4.6 : Comparison of Pre test And Post test Knowledge Score

	Knowledge on	Pre test		Post test		Mean Difference	Student's paired t-test
		Mean	SD	Mean	SD		
1	Disease condition	2.08	1.52	4.28	.94	2.2	t=9.71P=0.001 *** DF= 59 , Significant
2	Medications	1.22	.90	3.22	1.08	2	t=10.21 P=0.001 *** DF= 59 , Significant
3	Heat and cold therapy	1.30	1.09	3.27	1.23	1.97	t=8.77 P=0.001 *** DF= 59 , Significant
4	Diet	1.07	.86	2.35	1.04	1.28	t=7.62 P=0.001 *** DF= 59 , Significant
5	Rest and exercise	1.68	1.16	4.07	1.27	2.39	t=10.80 P=0.001 *** DF= 59 , Significant
6	Joint care and life style modification	2.00	1.59	3.97	1.34	1.97	t=7.85 P=0.001 *** DF= 59 , Significant
7	Stress reduction and coping	1.00	.86	2.52	.91	1.52	t=8.89 P=0.001 *** DF= 59 , Significant
8	Sexual activity	.95	.85	2.33	.91	1.38	t=8.76 P=0.001 *** DF= 59 , Significant
9	Adherence to therapeutic regimen and follow up	.97	.88	2.57	.85	1.6	t=9.06 P=0.001 *** DF= 59 , Significant
	TOTAL	12.27	3.72	28.57	2.92	16.30	t=27.55 P=0.001 *** DF= 59 , Significant

DF= Degrees of Freedom * very high significant at P≤0.001**

Table 4.6 : Shows the comparison of pre-test and post-test knowledge score regarding rehabilitation among patient with rheumatoid arthritis.

Considering Knowledge regarding **Disease condition**, in pre-test, patients are having 2.08 score whereas in post-test they are having 4.28 score. Difference is 2.20. This difference is large and it is statistically significant difference.

Considering **Medications**, in pre-test, patients are having 1.22 score whereas in post-test they are having 3.22 score. Difference is 2.0. This difference is large and it is statistically significant difference.

Considering Heat and **cold therapy**, in pre-test, patients are having 1.30 score whereas in post-test they are having 3.27 score. Difference is 1.97. This difference is large and it is statistically significant difference.

Considering Diet, in pre-test, patients are having 1.07 score whereas in post-test they are having 2.35 score. Difference is 1.28. This difference is large and it is statistically significant difference.

Considering Rest and **exercise**, in pre-test, patients are having 1.68 score whereas in post-test they are having 4.07 score. Difference is 2.39. This difference is large and it is statistically significant difference.

Considering Joint care and **life style modification**, in pre-test, patients are having 2.00 score whereas in post-test they are having 3.97score. Difference is 1.97. This difference is large and it is statistically significant difference.

Considering Stress **reduction and coping**, in pre-test, patients are having 1.00 score whereas in post-test they are having 2.52 score. Difference is 1.52. This difference is large and it is statistically significant difference.

Considering Sexual **activity**, in pre-test, patients are having 0.95 score whereas in post-test they are having 2.33 score. Difference is 1.38. This difference is large and it is statistically significant difference.

Considering Adherence to **therapeutic regimen and follow up**, in pre-test, patients are having 0.97 score whereas in post-test they are having 2.57 score. Difference is 1.60. This difference is large and it is statistically significant difference.

Significance of difference between pre-test and post-test score was calculated using student paired t-test.

Table 4 .7: Comparison of overall knowledge score before and after structured teaching programme

	No. of patients	Pre test Mean ± SD	Post test Mean ± SD	Mean difference Mean ± SD	Student's paired t-test
Overall Knowledge Score	60	12.27 ± 3.72	28.57 ± 2.92	16.30 ± 4.58	t=27.55 P=0.001*** DF = 59, significant

* significant at P≤0.05 ** highly significant at P≤0.01 *** very high significant at P≤0.001.

Table 4.7 : Reveals that the comparison of overall knowledge before and after the administration of structured teaching program on knowledge regarding rehabilitation among patients with rheumatoid arthritis in rheumatology ward..
On an average, patients are improved their knowledge from 12.27 to 28.57 after the administration of structured teaching programme. Or we can say, in pre-test they are able to answer only 12 questions before administration of STP, after administration of STP they are able to answer upto 28 questions. Due to STP they are able to answer 16 more questions correctly. This difference is statistically significant. Statistical significance was calculated by using student's paired 'test.

Table 4.8 : Pre test and post test level of knowledge score

Level of knowledge	Pre test		Post test		Generalized McNemar's test
	N	%	N	%	
Inadequate knowledge	55	91.7%	0	0.0%	$\chi 2=56.26$ P=0.001***(S)
Moderate knowledge	5	8.3%	11	18.3%	
Adequate knowledge	0	0.0%	49	81.7%	
Total	60	100.0%	60	100.0%	

*significant at $p < 0.05$ level

Table 4.8 : Shows the pre-test and post-test level of knowledge regarding rehabilitation among patients with rheumatoid arthritis Before Structures teaching programme , 91.7% of the patients are having inadequate level of knowledge score, 8.3% of them having moderate level of knowledge score and none of them are having adequate level of knowledge score. After structured teaching programme, none of the patients are having inadequate level of knowledge score, 18.3% of them having moderate level of knowledge score and 81.7% of them are having adequate level of knowledge score. Level of knowledge gain of between pre-test and post-test was calculated using Generalised McNamara's chi-square test.

Table 4.9: Percentage of knowledge gain score

	Max score	Mean score	Mean Difference of knowledge gain score with 95% Confidence interval	Percentage Difference of knowledge gain score with 95% Confidence interval
Pre test	35	12.27	16.30	46.57%
Post test	35	28.57	(15.11 – 17.48)	(43.17% –49.94%)

Table 4.9 : Reveals that the comparison of overall knowledge score between pre-test and post-test on an average in post-test patients are having after structured teaching programme patients are gained 46.57% more knowledge score than pre-test score. Regarding rehabilitation among patients with rheumatoid arthritis. Differences and generalization of knowledge gain score between pre-test and post-test score was calculated using and mean difference with 95% Confidence interval and proportion with 95% Confidence interval. This 46 .57 % knowledge gain shows the effectiveness of structured teaching programme on knowledge regarding rehabilitation among patients with rheumatoid arthritis.

Table 4.10: Effectiveness of Structured Teaching Programme

	Domains	Post test Knowledge	Pre test knowledge	% of knowledge gain
1	Disease condition	85.60%	41.60%	44.00%
2	Medications	80.50%	30.50%	50.00%
3	Heat and cold therapy	81.75%	32.50%	49.25%
4	Diet	78.33%	35.67%	42.66%
5	Rest and exercise	81.40%	33.60%	47.80%
6	Joint care and life style modification	79.40%	40.00%	39.40%
7	Stress reduction and coping	84.00%	33.33%	50.67%
8	Sexual activity	77.67%	31.67%	46.00%
9	Adherence to therapeutic regimen and follow up	85.67%	32.33%	53.34%
	Overall	81.63%	35.06%	46.57%

Table 4. 10 : Overall they gained 46.57% of knowledge score when comparing pre-test and post-test after having **structured teaching programm**e .This shows **effectiveness** of structured teaching programme on knowledge regarding rehabilitation among patients with rheumatoid arthritis.

Table 4.11: Association between pre test level of knowledge and their demographic variables

Demographic variables		Pre-test level of knowledge score						N	Chi square test
		Inadequate		Moderate		Adequate			
		n	%	n	%	n	%		
Age in years	25-35 years	20	90.91%	2	9.09%	0	0.00%	22	$\chi 2=1.63$
	36-45years	22	88.00%	3	12.00%	0	0.00%	25	P=0.65 (NS)
	46-60 years	10	100.00%	0	0.00%	0	0.00%	10	
	>60 years	3	100.00%	0	0.00%	0	0.00%	3	
Sex	Male	19	86.36%	3	13.643%	0	0.00%	22	$\chi 2=1.27$
	Female	36	94.73%	2	5.27%	0	0.00%	38	P=0.26 (NS)
Religion	Hindu	42	89.36%	5	10.64%	0	0.00%	47	$\chi 2=1.50$
	Muslim	4	100.00%	0	0.00%	0	0.00%	4	P=0.47 (NS)
	Christian	9	100.00%	0	0.00%	0	0.00%	9	
Marital status	Married	48	90.57%	5	9.43%	0	0.00%	53	$\chi 2=0.72$
	Unmarried	3	100.00%	0	0.00%	0	0.00%	3	P=0.69 (NS)
	Widow	4	100.00%	0	0.00%	0	0.00%	4	
	Divorced	0	0.00%	0	0.00%	0	0.00%	0	
Educational status	No formal education	5	100.00%	0	0.00%	0	0.00%	5	$\chi 2=4.17$ P=0.24 (NS)
	Primary education	29	85.29%	5	14.71%	0	0.00%	34	
	Secondary education	12	100.00%	0	0.00%	0	0.00%	12	
	Higher secondary	9	100.00%	0	0.00%	0	0.00%	9	
Occupational status	Heavy worker	15	83.33%	3	16.67%	0	0.00%	18	$\chi 2=2.34$ P=0.31 (NS)
	Moderate worker	21	95.45%	1	4.55%	0	0.00%	22	
	Sedentary worker	19	95.00%	1	5.00%	0	0.00%	20	
Monthly income	< Rs.3000	8	100.00%	0	0.00%	0	0.00%	8	$\chi 2=1.72$
	Rs .3001-5000	11	84.61%	2	15.39%	0	0.00%	13	P=0.63 (NS)
	Rs.5001-7000	20	90.90%	2	9.10%	0	0.00%	22	
	> Rs.7000	16	94.11%	1	5.89%	0	0.00%	17	
Duration of illness	< 1 year	25	96.15%	1	3.85%	0	0.00%	26	$\chi 2=1.20$
	1 -2 years	30	88.23%	4	11.77%	0	0.00%	34	P=0.27 (NS)
	2 -3 years	0	0.00%	0	0.00%	0	0.00%	0	
	> 3 years	0	0.00%	0	0.00%	0	0.00%	0	
Type of family	Nuclear family	40	95.23%	2	4.77%	0	0.00%	42	$\chi 2=0.05$ P=0.80 (NS)
	Joint family	27	96.42%	1	3.58%	0	0.00%	28	
Place of living	Urban	13	92.86%	1	7.14%	0	0.00%	14	$\chi 2=1.17$
	Rural	20	86.96%	3	13.04%	0	0.00%	23	P=0.55 (NS)
	Suburban	22	95.65%	1	4.35%	0	0.00%	23	

DF= Degrees of freedom

Not significant at $p > 0.05$

Table 4.11 : Reveals that the association between pre-test level of knowledge and their demographic variables. None of the demographic variables are significantly associated with their pre-test level of knowledge score Statistical significance was calculated using person chi square test. Not significant at $p > 0.05$.

Table 4.12: Association between post test level of knowledge and their demographic variables

Demographic variables		Post-test level of knowledge score						N	Chi square test
		In-adequate		Moderate		Adequate			
		n	%	n	%	n	%		
Age in years	25-35 years	0	0.00%	2	9.09%	20	90.91%	22	**$\chi 2=9.74$ P=0.02* (S)**
	36-45years	0	0.00%	3	12.00%	22	88.00%	25	
	46-60 years	0	0.00%	4	40.00%	6	60.00%	10	
	>60 years	0	0.00%	2	66.67%	1	33.33%	3	
Sex	Male	0	0.00%	1	4.54%	21	95.46%	22	**$\chi 2=4.41$**
	Female	0	0.00%	10	26.32%	28	73.68%	38	**P=0.04* (S)**
Religion	Hindu	0	0.00%	8	17.02%	39	82.98%	47	$\chi 2=2.30$
	Muslim	0	0.00%	0	0.00%	4	100.00%	4	P=0.31 (NS)
	Christian	0	0.00%	3	33.33%	6	66.67%	9	
Marital status	Married	0	0.00%	10	18.87%	43	81.13%	53	$\chi 2=0.80$
	Unmarried	0	0.00%	0	0.00%	3	100.00%	3	P=0.67 (NS)
	Widow	0	0.00%	1	25.00%	3	75.00%	4	
	Divorced	0	0.00%	0	0.00%	0	0.00%	0	
Educational status	No formal education	0	0.00%	4	80.00%	1	20.00%	5	**$\chi 2=14.01$ P=0.01** (S)**
	Primary education	0	0.00%	4	11.76%	30	78.24%	34	
	Secondary education	0	0.00%	2	16.67%	10	83.33%	12	
	Higher secondary	0	0.00%	1	11.11%	8	88.89%	9	
Occupational status	Heavy worker	0	0.00%	3	16.67%	15	83.33%	18	$\chi 2=2.13$ P=0.34 (NS)
	Moderate worker	0	0.00%	6	27.27%	16	72.73%	22	
	Sedentary worker	0	0.00%	2	10.00%	18	90.00%	20	

Monthly income	< Rs.3000	0	0.00%	2	25.00%	6	75.00%	8	$\chi 2$=1.08 P=0.78 (NS)
	Rs .3001-5000	0	0.00%	2	15.38%	11	84.62%	13	
	Rs.5001-7000	0	0.00%	5	22.73%	17	77.27%	22	
	> Rs.7000	0	0.00%	2	11.76%	15	88.24%	17	
Duration of illness	< 1 year	0	0.00%	1	3.84%	25	96.16%	26	**$\chi 2$=6.43 P=0.01** (S)**
	1 -2 years	0	0.00%	10	29.41%	24	70.59%	34	
	2 -3 years	0	0.00%	0	0.00%	0	0.00%	0	
	> 3 years	0	0.00%	0	0.00%	0	0.00%	0	
Type of family	Nuclear family	0	0.00%	4	18.18%	18	81.82%	22	$\chi 2$=3.87P=0.27 (NS)
	Joint family	0	0.00%	3	11.11%	24	88.89%	27	
Place of living	urban	0	0.00%	4	28.57%	10	71.43%	14	$\chi 2$=4.90P=0.09 (NS)
	Rural	0	0.00%	1	4.35%	22	95.65%	23	
	Sub urban	0	0.00%	6	26.09%	17	73.91%	23	

Table 4.12 : Reveals that the association between post-test level of knowledge and their demographic variables. Younger age patients, male patients, more educated patients and less duration of illness patients are gained more level of knowledge score than others. Statistical significance was calculated using Pearson chi square test.

Table 4.13: Association between knowledge gain score and patients demographic variables

Demographic variables		N	Knowledge gain score						One way ANOVA F-test/t-test
			Pretest		Posttest		Gain score=Post-Pre		
			Mean	SD	Mean	SD	Mean	SD	
Age in years	25-35 years	22	12.59	3.16	30.53	3.34	17.94	4.17	**F=2.76**
	36-45years	25	12.28	4.49	27.98	2.49	15.70	5.37	**P=0.05* (S)**
	46-60 years	10	11.60	3.17	26.50	3.17	14.90	3.38	
	>60 years	3	12.00	3.61	23.67	2.08	11.67	4.93	
Sex	Male	22	12.50	4.52	29.74	2.77	17.24	5.12	**t=2.11**
	Female	38	12.55	3.00	27.23	3.04	14.68	4.15	**P=0.04* (S)**
Religion	Hindu	47	12.72	3.50	28.77	2.67	16.04	4.22	F=1.86
	Muslim	4	8.75	3.86	29.25	1.89	20.50	4.51	P=0.16 (NS)
	Christian	9	11.44	4.22	27.22	4.24	15.78	5.93	
Marital status	Married	53	12.47	3.74	28.64	2.92	16.17	4.77	F=0.50
	Unmarried	3	14.00	1.00	29.67	2.08	15.67	1.53	P=0.61 (NS)
	Widow	4	8.25	1.71	26.75	3.30	18.50	3.11	
	Divorced	0	0.00	0.00	0.00	0.00	0.00	0.00	
Educational status	No formal education	5	12.80	1.48	26.20	3.27	13.40	4.39	**F=3.21**
	Primary education	34	12.88	4.08	27.59	2.74	14.71	4.88	**P=0.03* (S)**
	Secondary education	12	12.00	3.25	29.92	3.85	17.92	4.68	
	Higher secondary	9	11.56	1.94	30.30	2.24	18.74	2.79	
Occupational status	Heavy worker	18	14.39	3.79	30.00	2.77	15.61	5.29	F=0.28
	Moderate worker	22	11.14	3.14	27.82	3.20	16.68	3.54	P=0.83 (NS)
	Sedentary worker	20	11.60	3.60	27.90	2.34	16.30	3.88	
Monthly income	< Rs.3000	8	13.00	3.89	27.25	3.33	14.25	6.25	F=1.88
	Rs .3001-5000	13	13.77	2.65	28.54	2.50	14.77	4.11	P=0.15 (NS)
	Rs.5001-7000	22	12.23	2.69	29.14	3.30	16.91	3.54	
	> Rs.7000	17	12.94	2.88	29.00	2.35	16.06	3.31	
Duration of illness	< 1 year	26	11.81	2.59	29.12	3.18	17.31	2.90	**F=2.03**
	1 -2 years	34	12.62	4.40	27.65	2.70	15.03	5.58	**P=0.05* (S)**
	2 -3 years	0	0.00	0.00	0.00	0.00	0.00	0.00	
	> 3 years	0	0.00	0.00	0.00	0.00	0.00	0.00	

Type of family	Nuclear family	42	13.09	3.16	28.09	3.08	15.00	3.73	t=1.92 P=0.07 (NS)
	Joint family	28	12.15	4.04	29.19	2.54	17.04	4.34	
Place of living	Urban	14	11.86	3.25	27.14	3.72	15.29	5.09	F=0.44 P=0.64 (NS)
	Rural	23	12.61	4.44	29.17	2.06	16.57	4.93	
	Suburban	23	12.17	3.30	28.83	2.95	16.65	3.98	

DF = Degree of freedom

Significant at p <0.05

Table 4.13 : Reveals that the association between level of knowledge gain score and their demographic variables. Younger age patients, male patients, more educated patients and less duration of illness patients are gained more s knowledge score than others. Statistical significance was calculated using one-way analysis of variance F-test and student independent t-test.

CHAPTER V

DISCUSSION

The present study was designed to assess the effectiveness of structured teaching programme on knowledge regarding rehabilitation among patients with rheumatoid arthritis in rheumatology ward in Rajiv Gandhi Government General Hospital Chennai 03.The research design used was pre experimental, one group pre and post-test design. Non probability, purposive sampling was adopted to select 60 samples. Semi structured questionnaire was used to assess levels of knowledge regarding rehabilitation among rheumatoid arthritis. Pre-test conducted to study samples, then administered structured teaching programme regarding rehabilitation among rheumatoid arthritis. The post test was conducted by the researcher after 7 days

The findings of the study will be discussed based on the objectives

- To assess the level of knowledge regarding rehabilitation among patient with rheumatoid arthritis
- To determine the effectiveness of structured teaching programme on knowledge regarding rehabilitation among patients with rheumatoid arthritis
- To determine the association between the selected variables and post-test knowledge regarding rehabilitation among patient with rheumatoid arthritis

The objectives of the study was to assess the level of knowledge regarding rehabilitation among patients with rheumatoid arthritis.

In pre-test ,knowledge regarding rehabilitation among patient with rheumatoid arthritis before administration of structured teaching programme .In general 91.7% of patients are having inadequate knowledge score and (8.3%)

of them having moderate knowledge score and none of them are having adequate knowledge score.

The post-test knowledge regarding rehabilitation among patient with rheumatoid arthritis after administration of structured teaching programme ,none of the patients are having inadequate level of knowledge score ,18.3 % of them having moderate level of knowledge score and 81.7% of them are having adequate level of knowledge score

The findings of the study more or less similar with study done by walker, (2012) it is mainly due to less awareness of rehabilitation among rheumatoid arthritis people .Hence there is a need for health education among peoples to increase their level of awareness and knowledge regarding rehabilitation among rheumatoid arthritis .The study was conducted in Kolar district, population of the study was 86 younger patients ,Structured interview technique was used to collect the data .Non probability convenient sampling technique was used .The data was planned to analyse on the basis of objective and hypothesis of the study .Descriptive and inferential statistics were used for data analysis .The research was concluded with improved knowledge regarding rehabilitation among rheumatoid arthritis .

The second objectives of the study was to evaluate the effectiveness of structured teaching programme regarding rehabilitation among patient with rheumatoid arthritis.

There is a significant difference between pre-test and post-test knowledge of patients receiving structured teaching programme on knowledge regarding rehabilitation among patients with rheumatoid arthritis .Hypothesis -1 was accepted

In post-test patients are gained 46.57%of knowledge score after having structured teaching programme on knowledge regarding rehabilitation among patients with rheumatoid arthritis differences between pre-test and post-test

score was analysed using proportion with 95% confidence interval and mean difference with 95% confidence interval .This 46.57%knowledge gain shows the effectiveness of structured teaching programme on knowledge regarding rehabilitation among patients with rheumatoid arthritis

Over all they gained 46.57% knowledge score when comparing the pre-test and post-test after having the structured teaching programme .This shows the effectiveness of structured teaching programme on knowledge regarding rehabilitation among patient with rheumatoid arthritis

The findings of the study are more or less similar with the study done by Salonen,(2014) has conducted a study to assess structured teaching programme on learning ,satisfaction with teaching approach and health status of person with rheumatoid arthritis .subjects rated self-instruction as an effective teaching strategy in terms of promoting learning about rheumatoid arthritis and patient acceptability

The findings shows that the structured teaching programme was effective in improving the knowledge of the subjects related to rehabilitation among rheumatoid arthritis as per t test .As the post-test Mean (23.8 2.4) was significantly higher mean score whereas there was no significant difference in the pre-test mean in the both groups .Hence it was concluded that structured teaching programme was effective in rehabilitation among patients with rheumatoid arthritis

The third objectives of the study was to determine the association between the selected demographic variables and post-test knowledge regarding rehabilitation among patients with rheumatoid arthritis

The younger age patients, male patients, more educated patients and less duration of illness patients are gained more level of knowledge score than others .There is a significant difference between selected demographic variables and post-test knowledge, Hence Hypothesis –was accepted

The findings of the study are more or less similar with study done by Matthias Schneider (2012) A population based cross sectional study was conducted to assess the prevalence of rheumatoid arthritis in younger patients in rural areas of Rajasthan and total of 428 patients of 25 to 30 years and above are examined. The result was concluded that lack of knowledge regarding rehabilitation among rheumatoid arthritis to be a significant problem among the younger living in remote areas of rural North West India

CHAPTER VI

SUMMARY, IMPLICATIONS, RECOMMENDATIONS, LIMITATIONS AND CONCLUSION

In this chapter, the summary of the study, conclusion implication and recommendations for further researches are presented

6.1 SUMMARY OF THE FINDINGS

The study was conducted to determine the effectiveness of structured teaching programme on knowledge regarding rehabilitation among patients with rheumatoid arthritis in rheumatology ward at Rajiv Gandhi Government General Hospital ,Chennai 03 A pre experimental study one group pre-test and post-test design was used for this study .The conceptual framework this research was based on Ludwig vow Bertalanffes General system Theory (1962).The instruments was used for data collection was a semi structured questions to assess the level of knowledge of the samples which include a pre-test and post-test regarding rehabilitation among patients with rheumatoid arthritis 60 samples which selected by random sampling technique .Descriptive statistics (frequency percentage ,mean ,standard deviation) and inferential statistics (paired t test and chi square) were used to analyse the data to test the study hypothesis

THE STUDY FINDINGS SUMMARIZED BELOW:

The effectiveness of structured teaching programme on knowledge regarding rehabilitation among patients with rheumatoid arthritis to assessed by pre-test and post-test scored .Findings of the study showed that the pre-test mean value of (12.27)with the SD is (3.72) and after the structured teaching programme the post-test mean valve of (28.57) with the SD is (2.92) so the computed t value is (27.55) which is highly statistically significant .This shows that the structured teaching programme was effective to improving the level of knowledge regarding rehabilitation among patients with rheumatoid arthritis

The pre-test levels of knowledge regarding rehabilitation among patient with rheumatoid arthritis on their demographic variables age in years sex, religion ,marital status ,educational status ,occupational status, monthly income ,duration of illness ,type of family and place of living ,none of the demographic variables are significantly associated with their pre-test level of knowledge score statistical significance was calculated using person chi square test not significant

The post-test level of knowledge regarding rehabilitation among patients with rheumatoid arthritis and their demographic variables .younger age patients, male patients ,more educated patients and less duration of illness are gained more level of knowledge score than others .Statistical significance was calculated using Pearson chi square test

6.2IMPLICATIONS OF THE STUDY

The investigator has drawn the following implications from the studies which are of vital concern in the field of nursing practice, nursing education, nursing administration and nursing research

Implication for nursing practice

- Structured teaching programme on knowledge regarding rehabilitation among rheumatoid arthritis is to be scheduled in the rheumatology inpatient department by using appropriate audio visual aids
- Self-instructional module on rehabilitation among rheumatoid arthritis can be distributed to the patients who are visiting to the hospital

Survey can be conducted to identify rheumatoid arthritis patients and education programme can be conducted to prevent the complications of rheumatoid arthritis and to prevent the long term disability

Implication for nursing education

Conferences, workshops and seminars can be held for nurses to import update recent advancement in treating rheumatoid arthritis patients

Implication for nursing administration

- The administrator can encourage the nurses for conducting research aspects regarding rheumatoid arthritis
- The administrator can organize conferences ,workshops ,and seminars for nurses working in the hospital

Implication for nursing research

This study is a preliminary set up for exploring the concept of knowledge regarding rehabilitation among rheumatoid arthritis patients .The result of the study encourages the rheumatoid arthritis patients in healthy lifestyle

6.3RECOMMENDATIONS

The study recommended the following for the further research

- A similar study can be replicated on a large scale basis
- A comparative study can be conducted to assess the effectiveness of structured teaching programme on knowledge regarding rehabilitation among rheumatoid arthritis between rural and urban rheumatoid arthritis patients
- A longitudinal study can be conducted to assess the vulnerability of knowledge regarding rheumatoid arthritis patients
- A longitudinal study can be conducted to identify the avoiding and how to prevent the rheumatoid arthritis

6.4 LIMITATIONS OF THE STUDY

- ❖ The study not assess the attitude and practice of rheumatoid arthritis rehabilitation .Only single domain knowledge is considered in the present study
- ❖ The number of samples is limited to 60 in the present study
- ❖ The duration of the study was also limited to 6 weeks periods, so the researcher could not implement the entire teaching programme
- ❖ The investigator followed only pre experimental one group pre-test post-test design; hence the investigator could not compare the effectiveness of knowledge with the control group

6.5 CONCLUSION

The findings of the study revealed that there was a significant difference between pre-test and post-test knowledge scores of patients with rheumatoid arthritis .There was a significant difference between selected demographic variables and post-test knowledge score of patients regarding rehabilitation among rheumatoid arthritis .It reveals that the structured teaching programme was effective in improving the knowledge regarding rehabilitation among rheumatoid arthritis .Structured teaching programme is easily understandable and cost effective programme .which improves the knowledge regarding rehabilitation among patients rheumatoid arthritis

Fig. 1.1 Ludwig Vow Bertalanffe's General System Theory (1962)

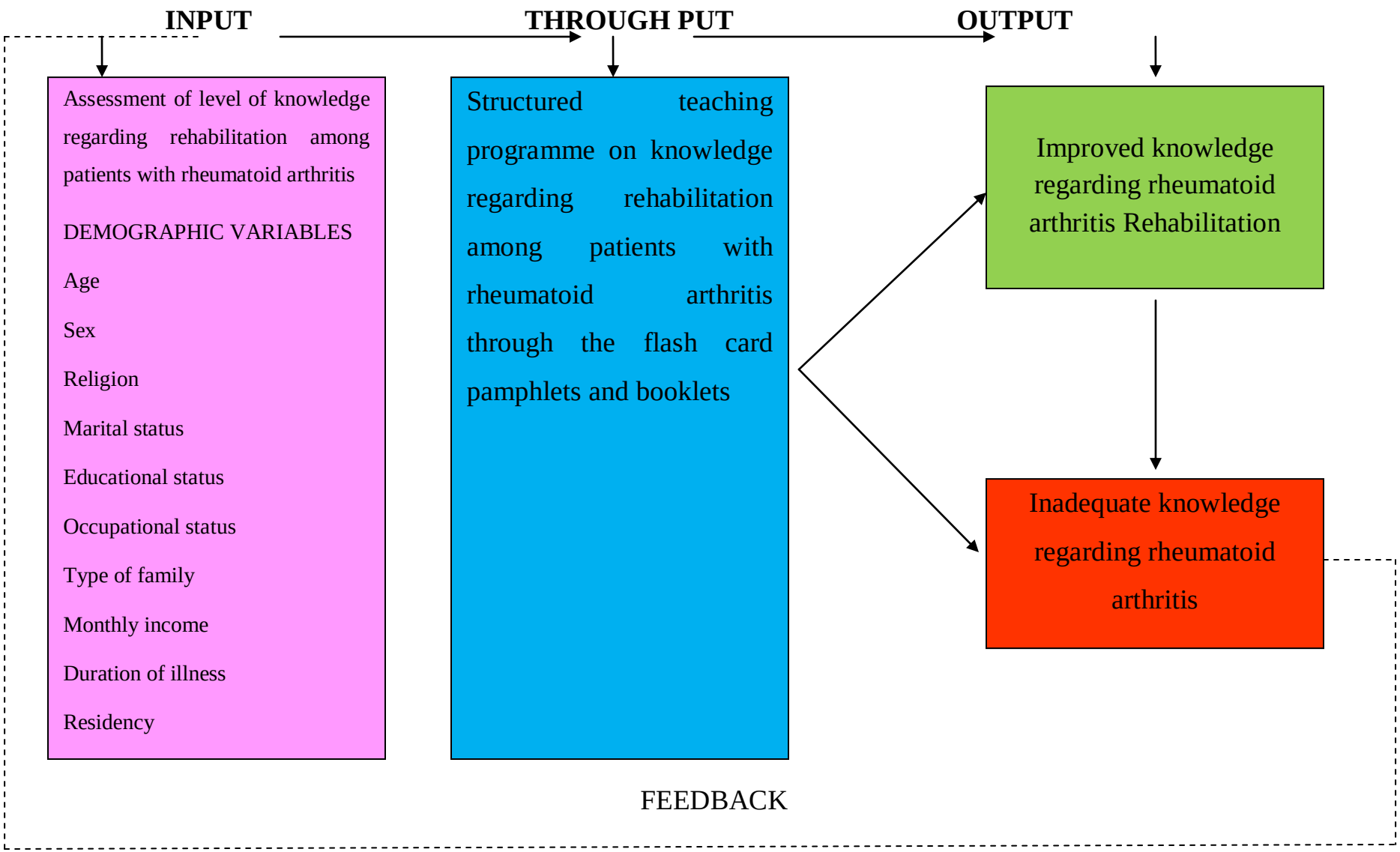
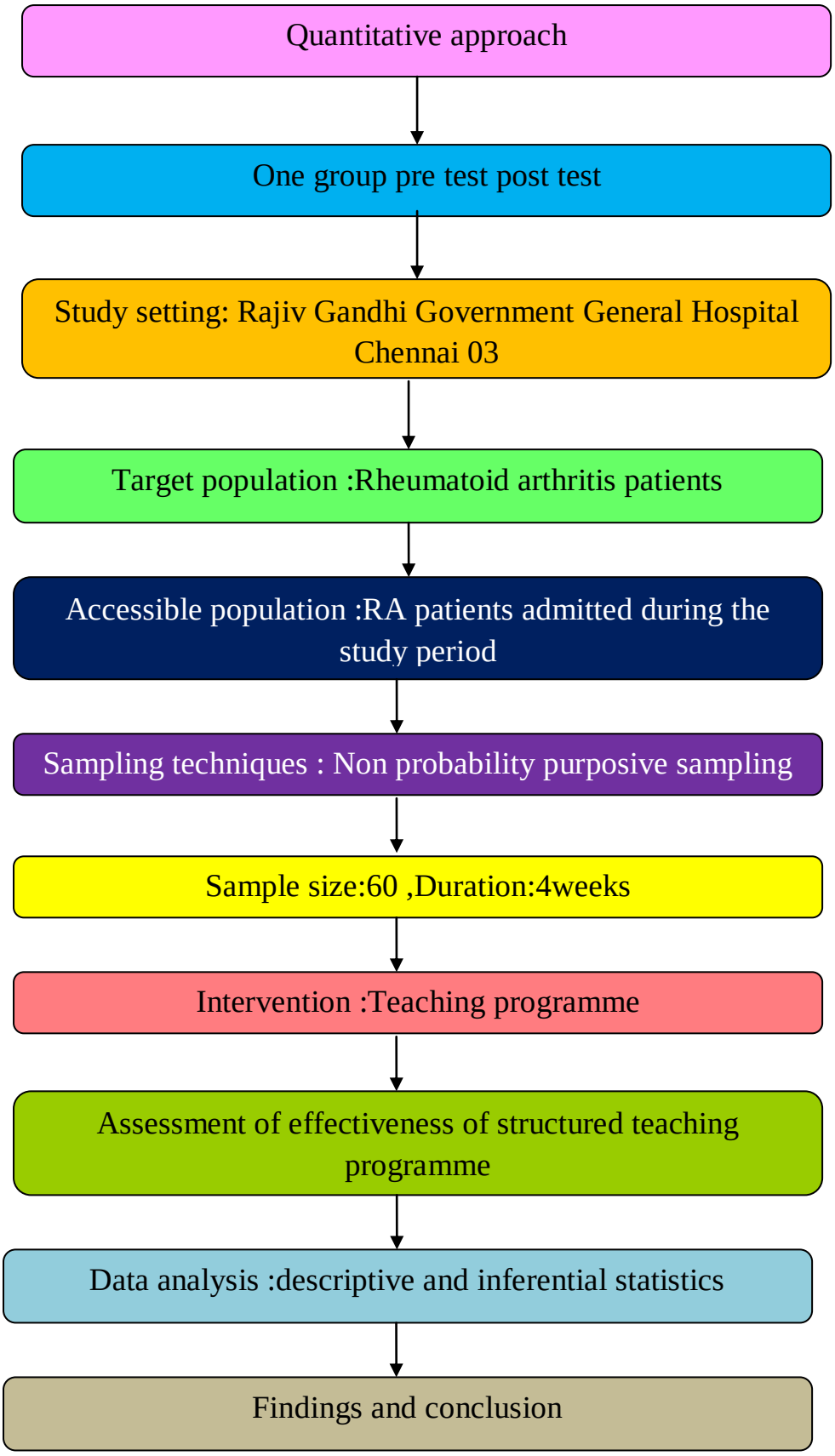


Fig 3.1 Schematic representation of research design



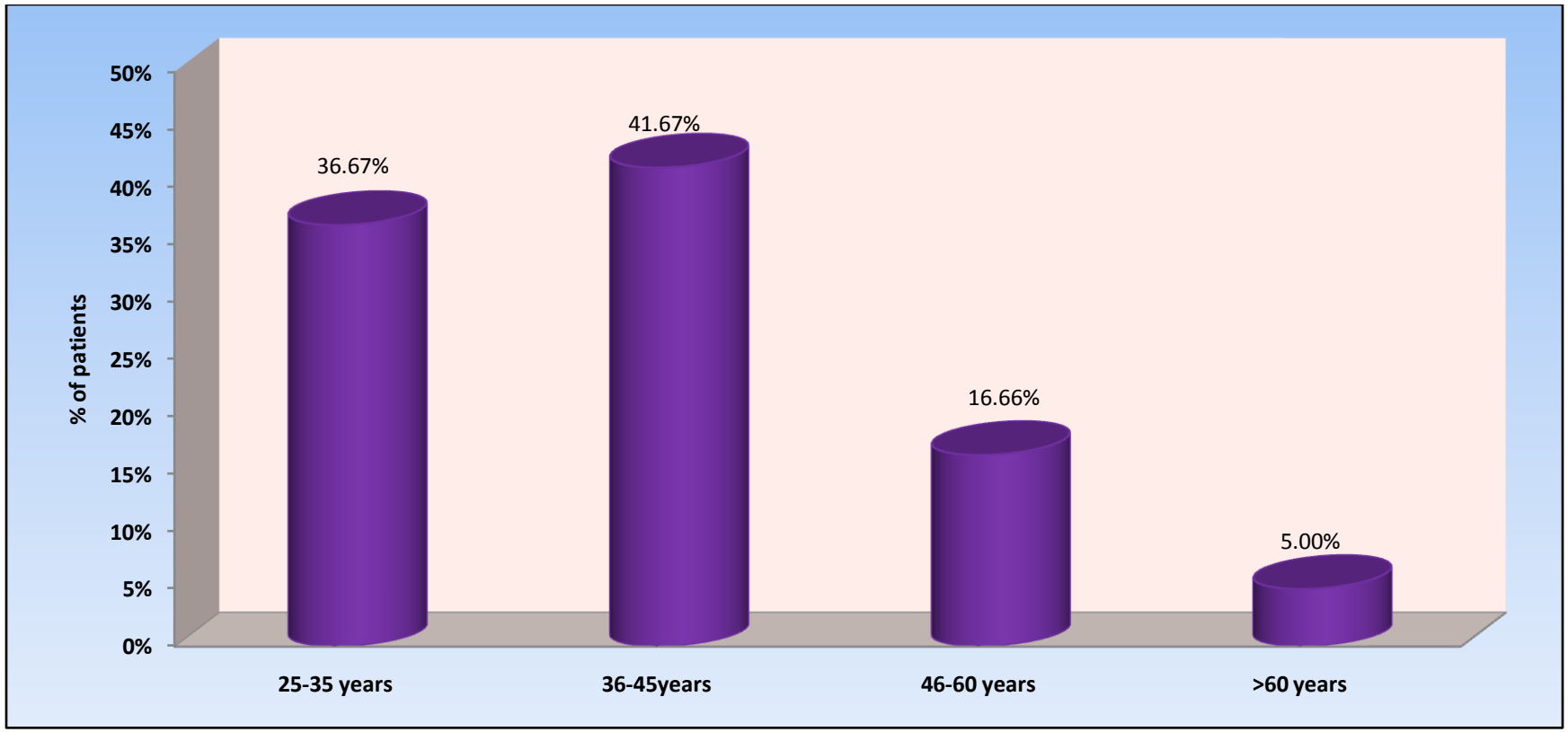


Fig 4.1 Distribution of Age of the study participants

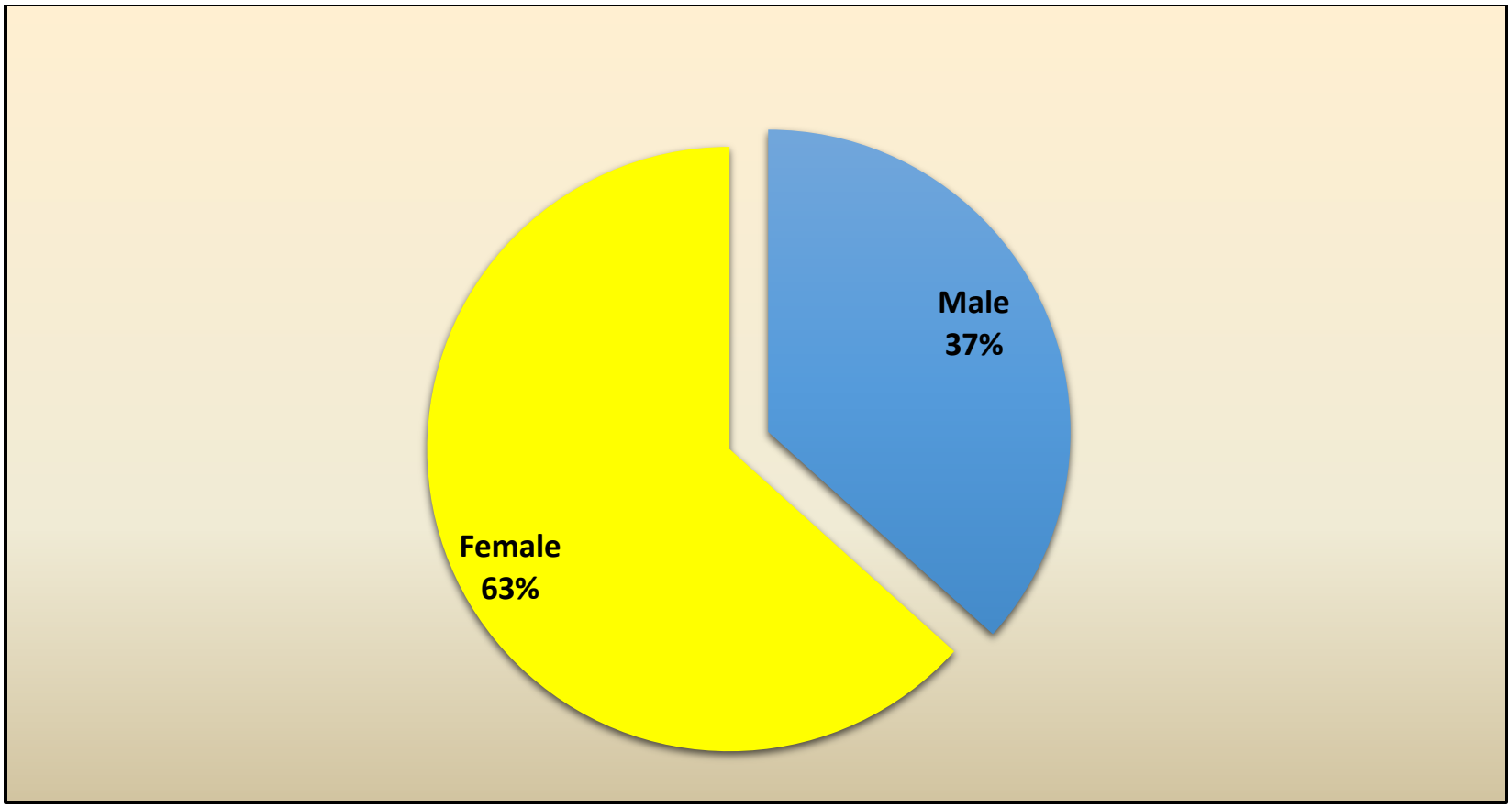


Fig .4.2 Distribution of sex of the study participants

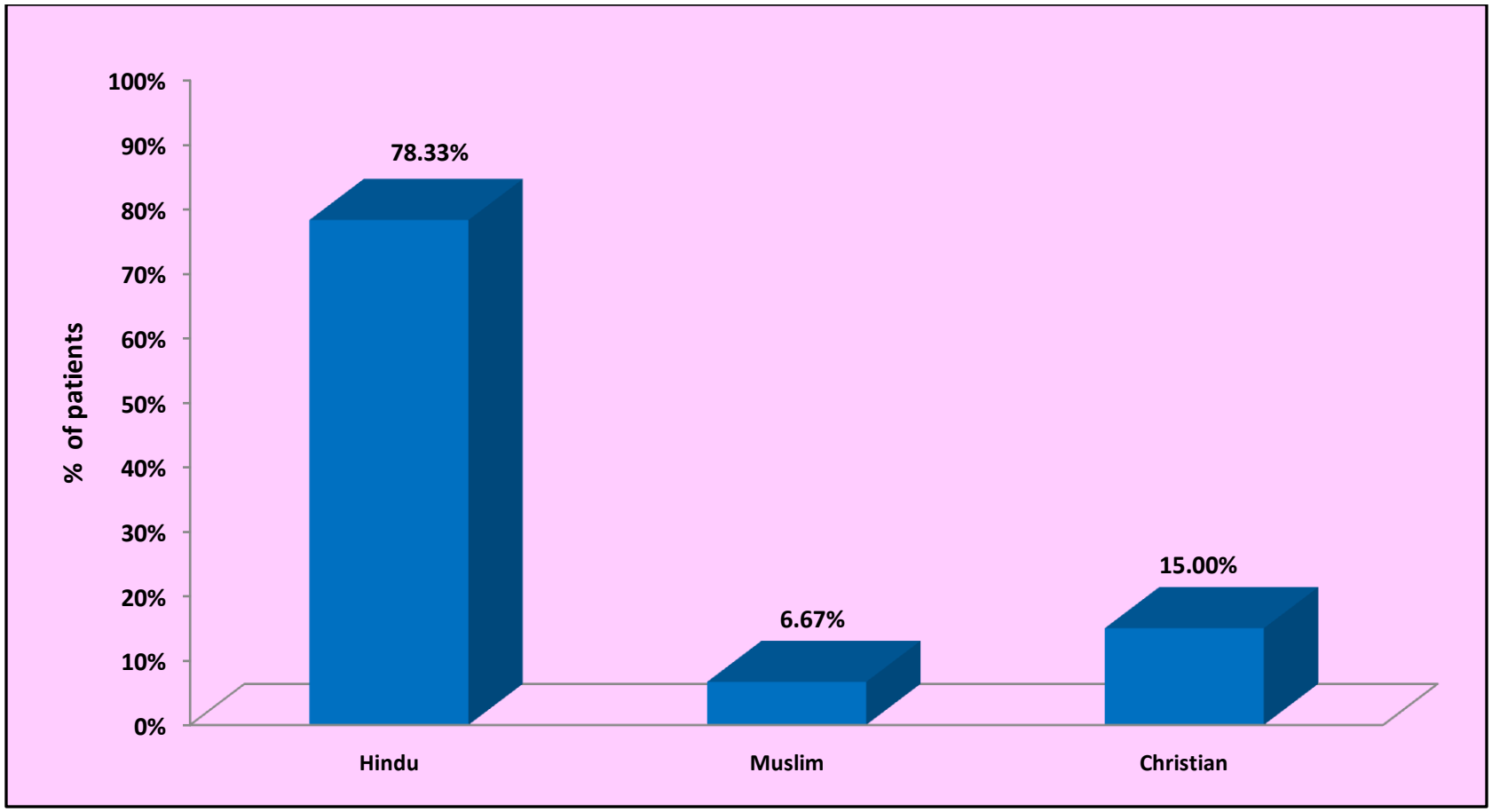


Fig 4.3 Distribution of religion of the study participants

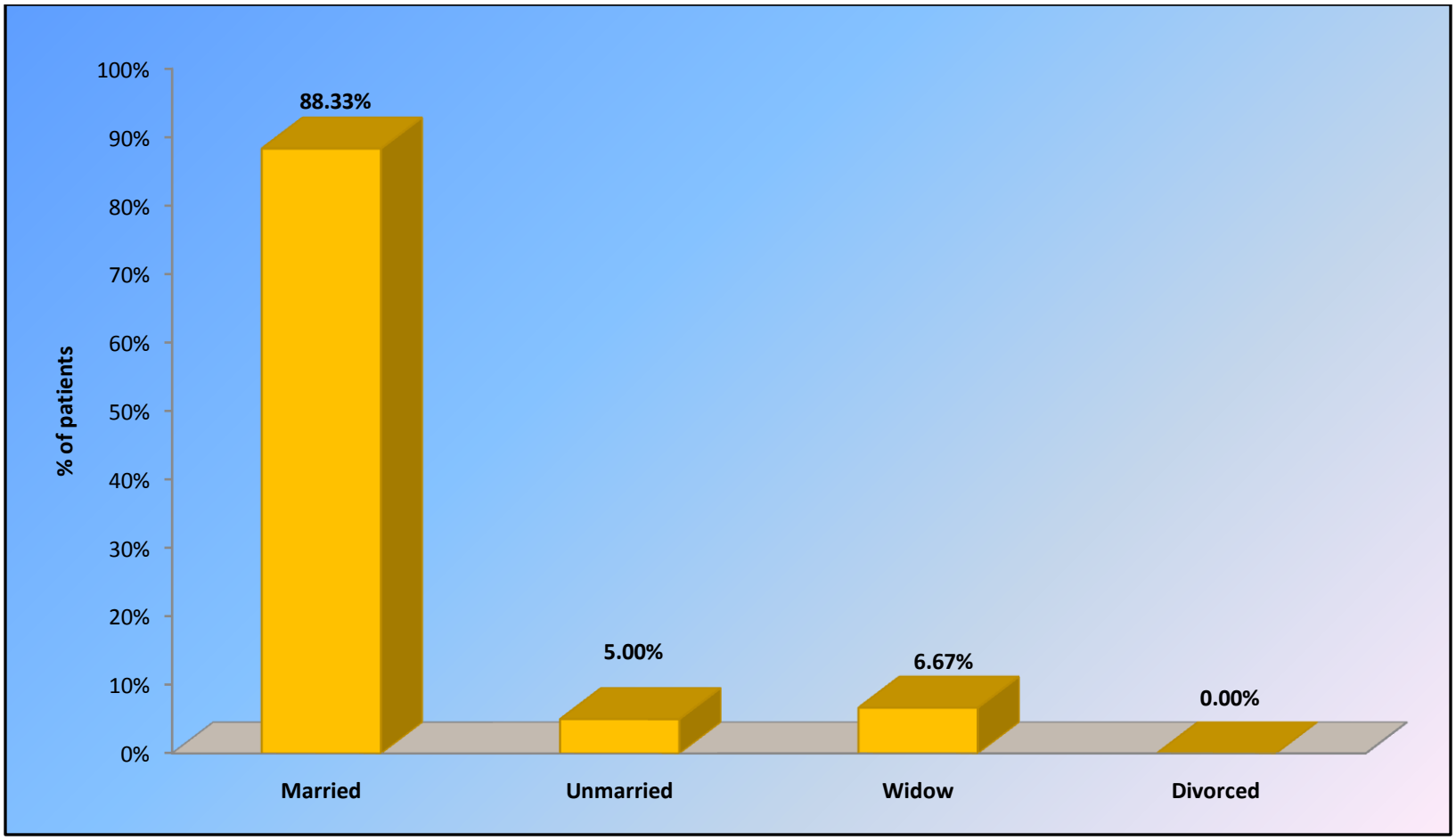


Fig 4.4 Distribution of marital status of the study participants

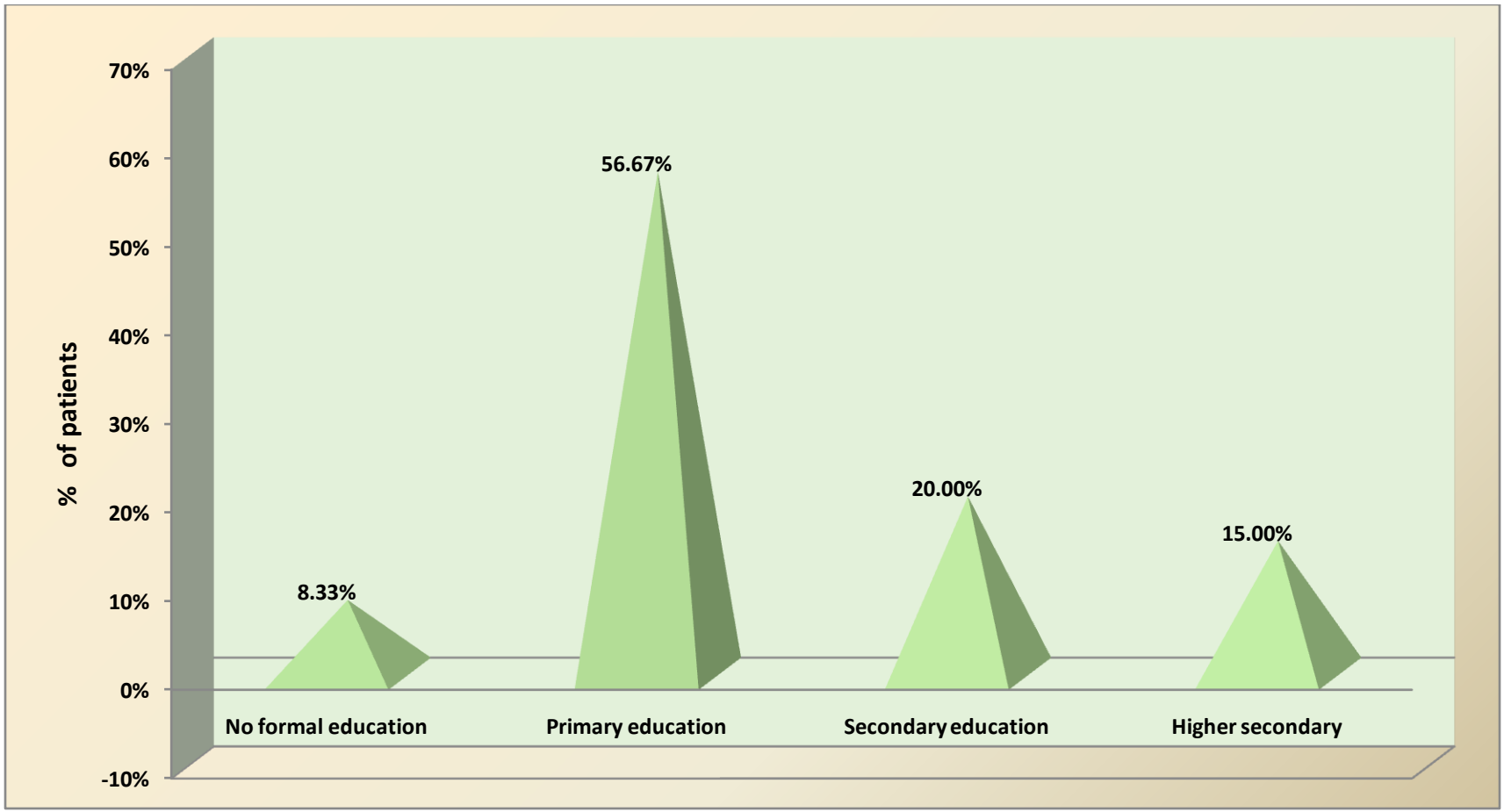


Fig 4.5 Distribution of Educational status of the study participants

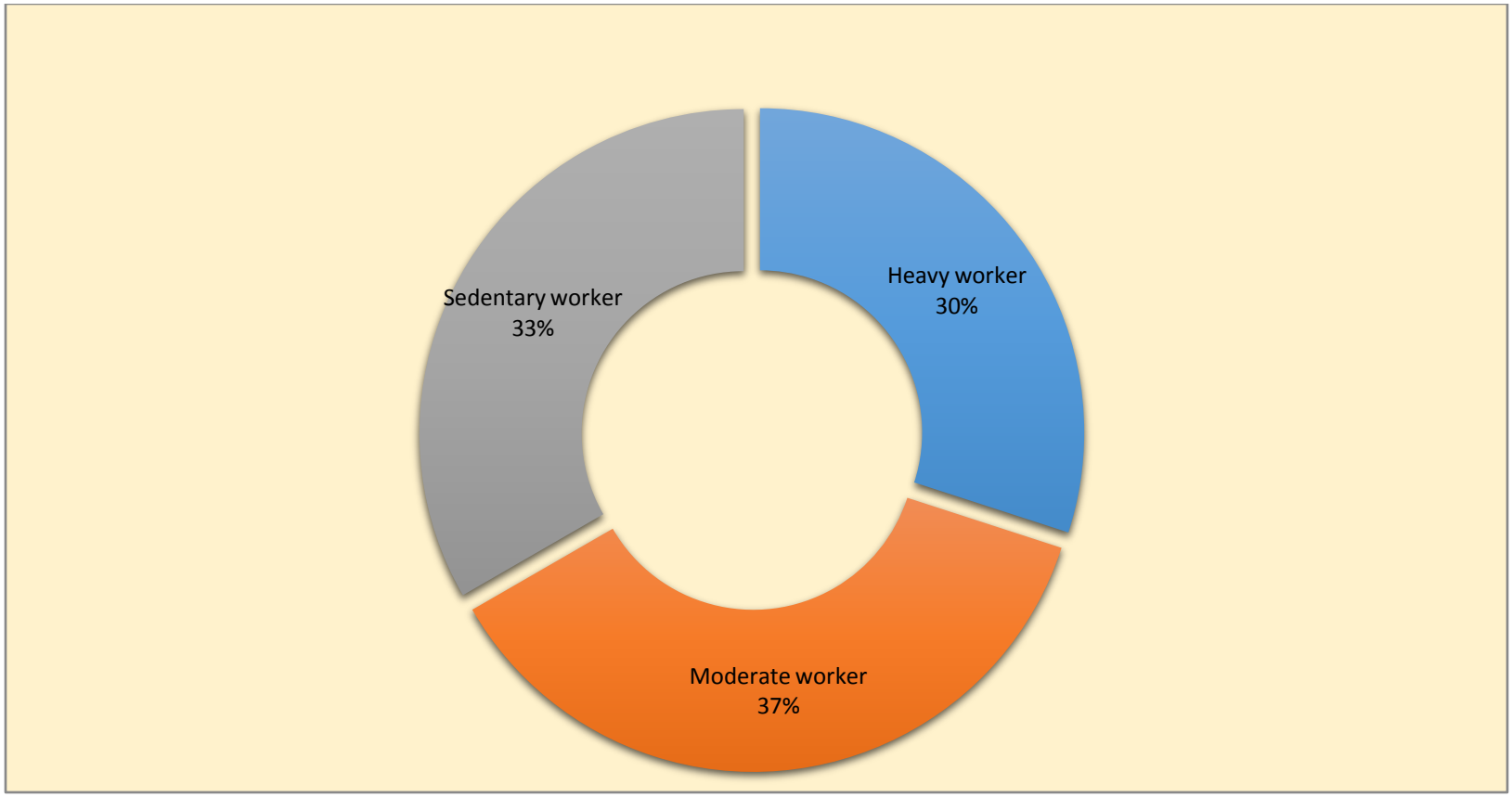


Fig 4.6 Distribution of Occupational status of the study participants

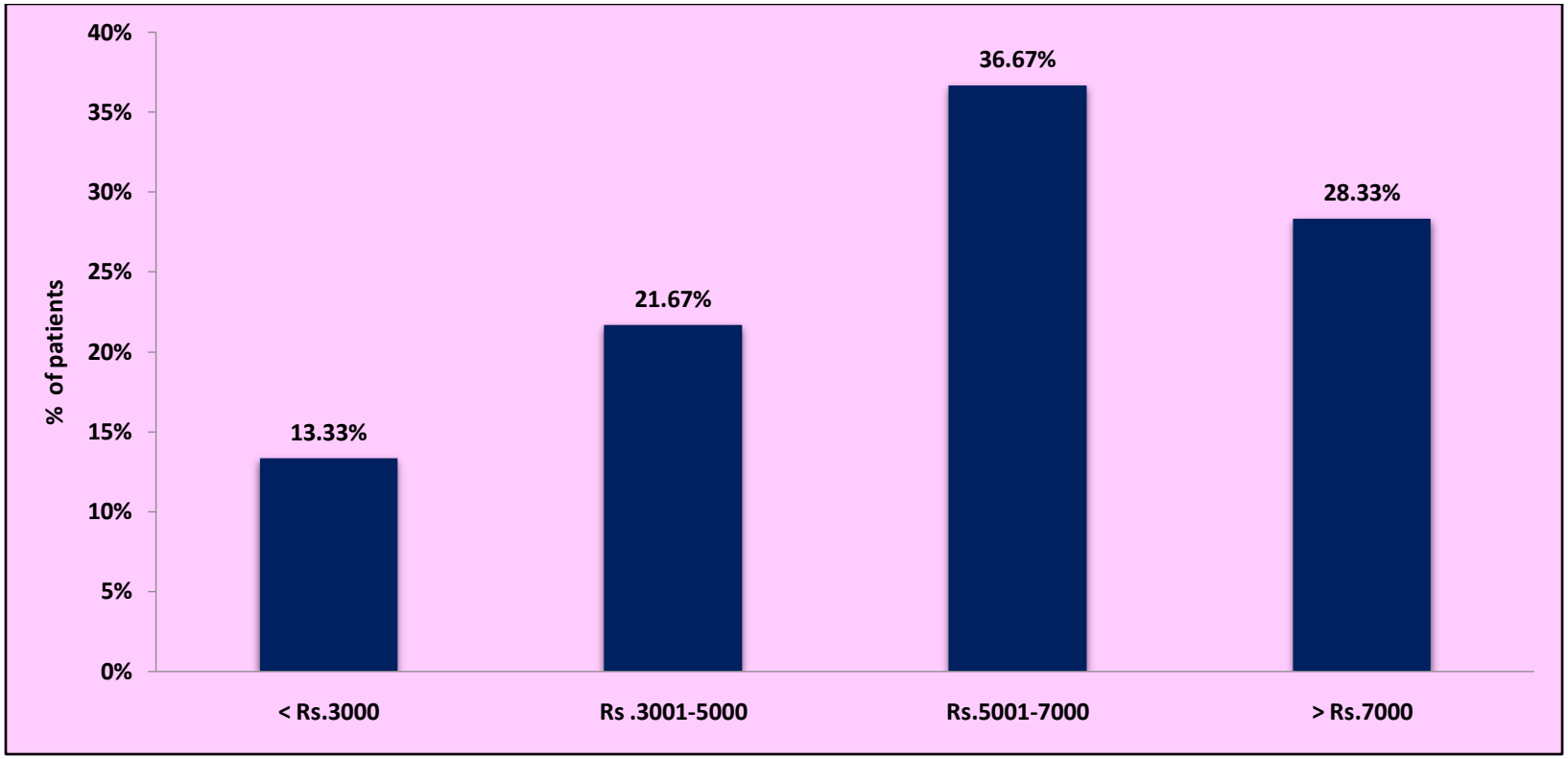


Fig.4.7 Distribution of monthly income of the study participants

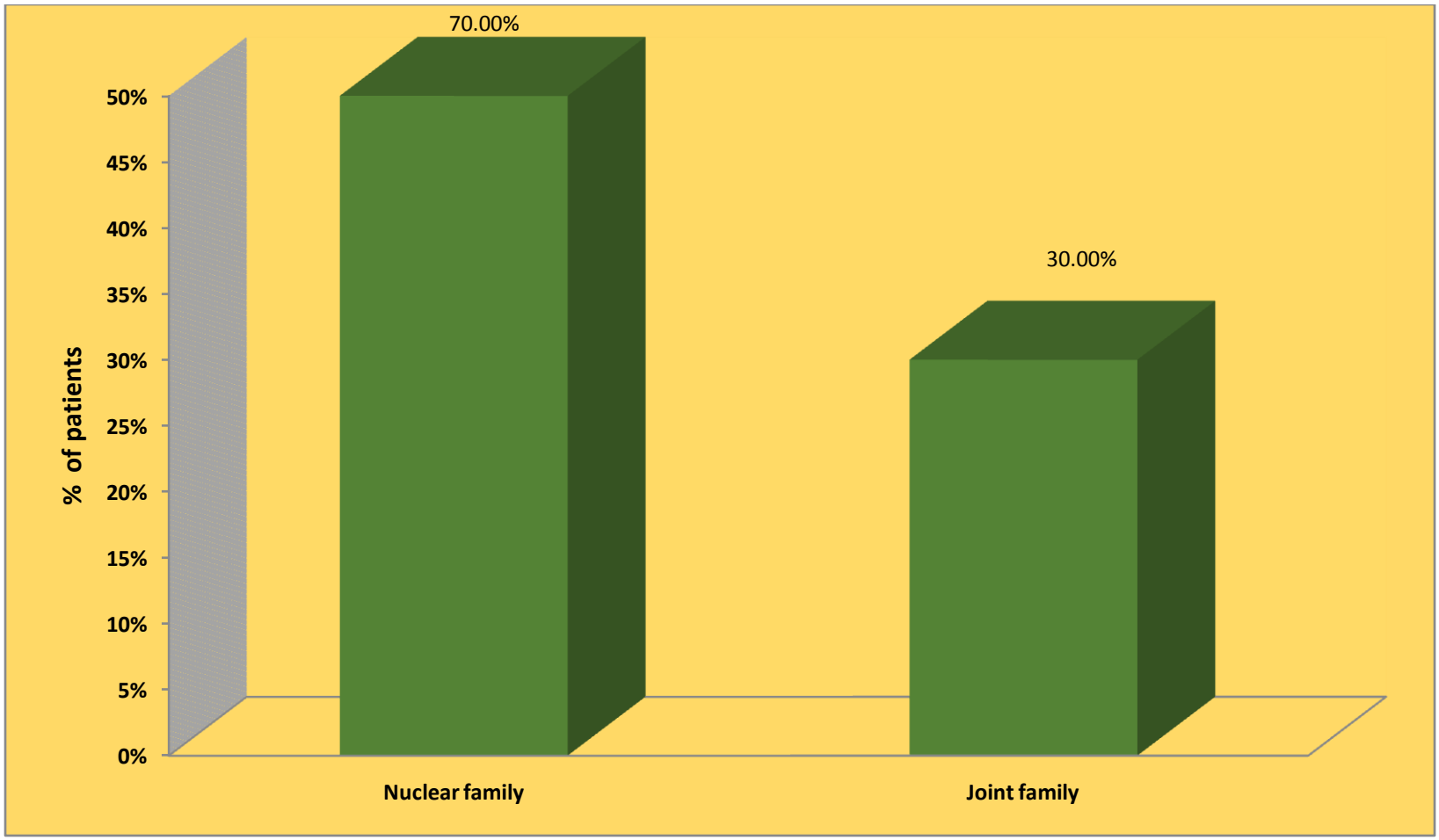


Fig 4.8 Distribution of type of the family of study participants

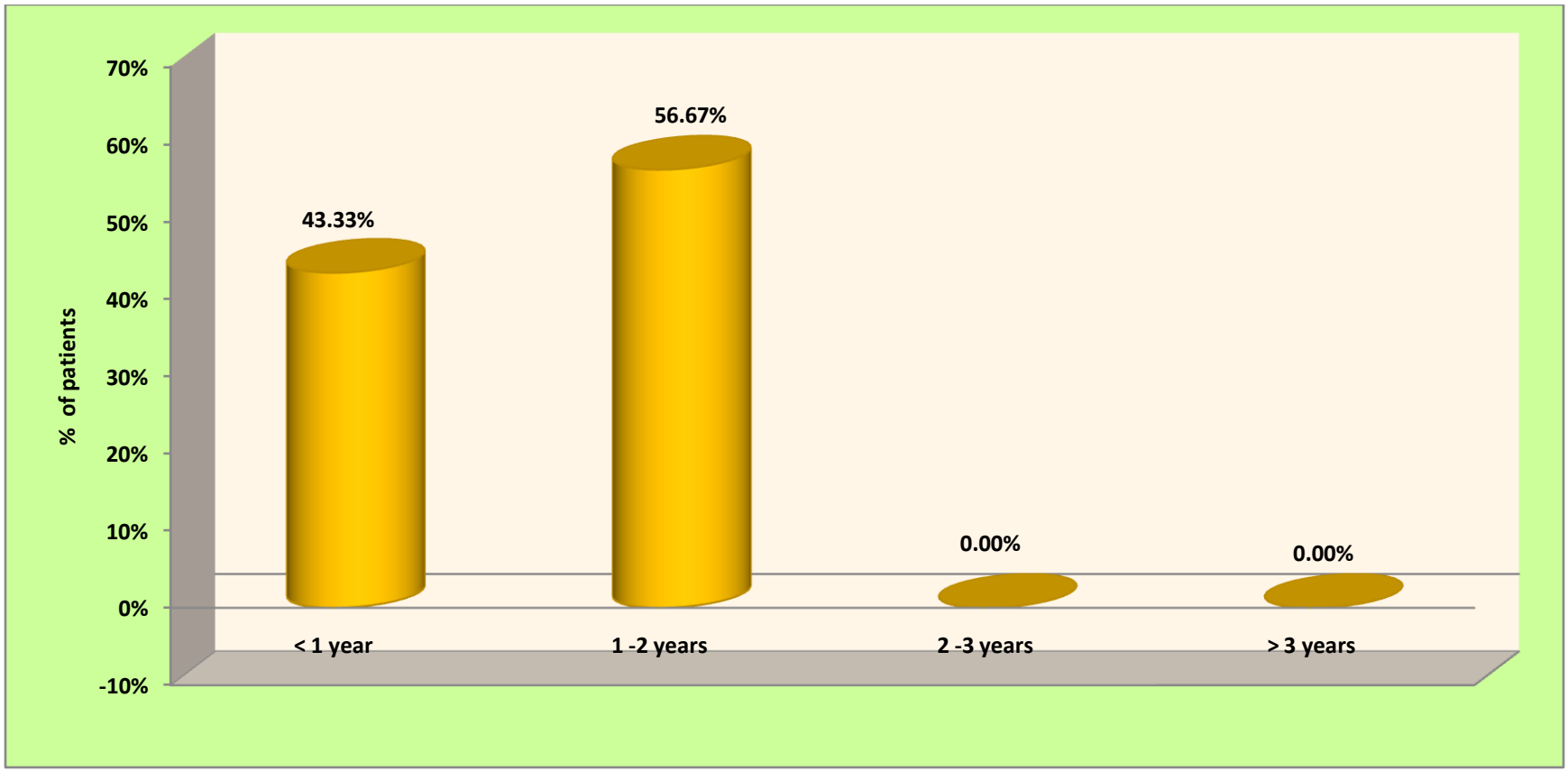


Fig: 4.9 Distribution of duration of illness of study participants

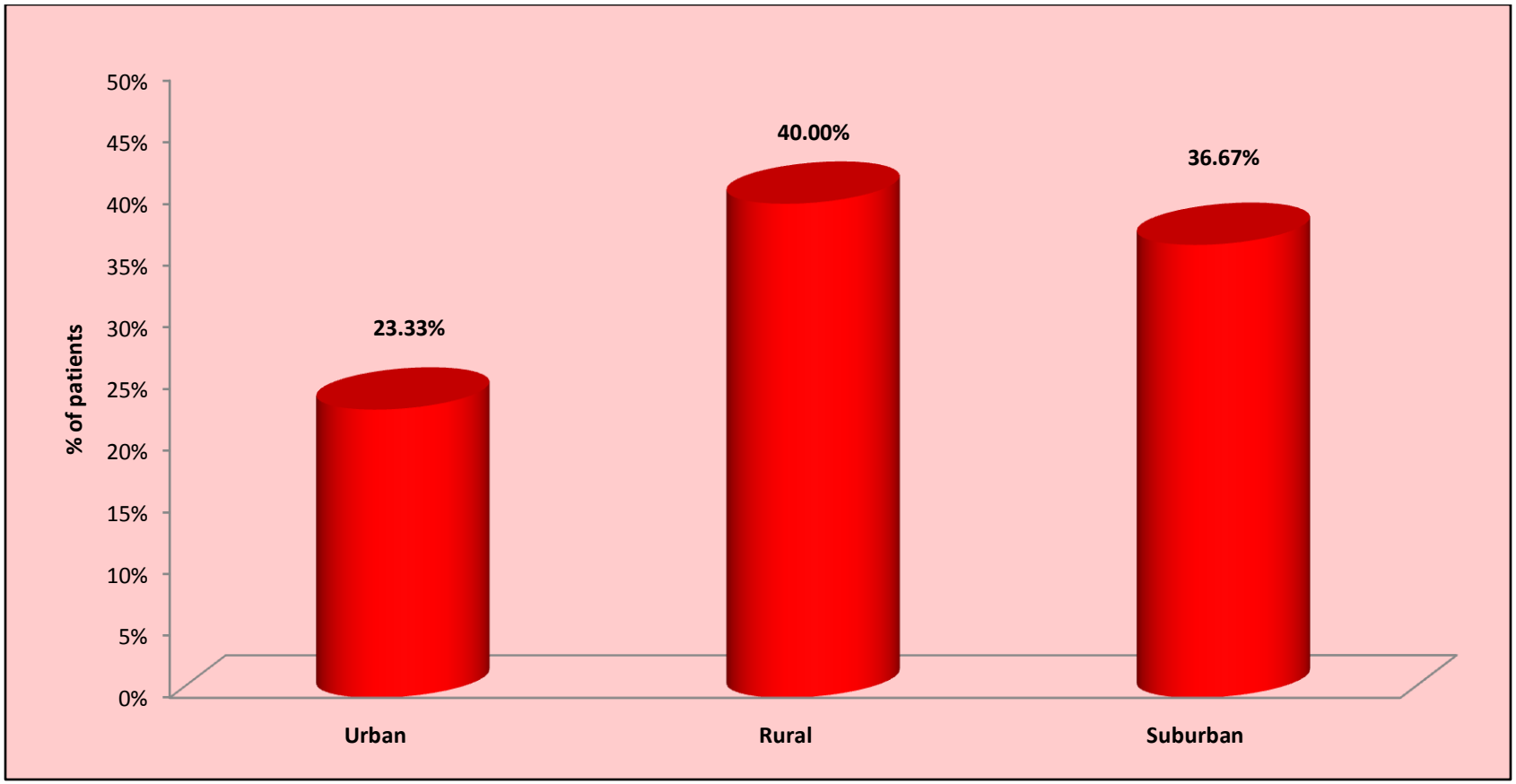


Fig.4.10 Distribution of area /location of study participants

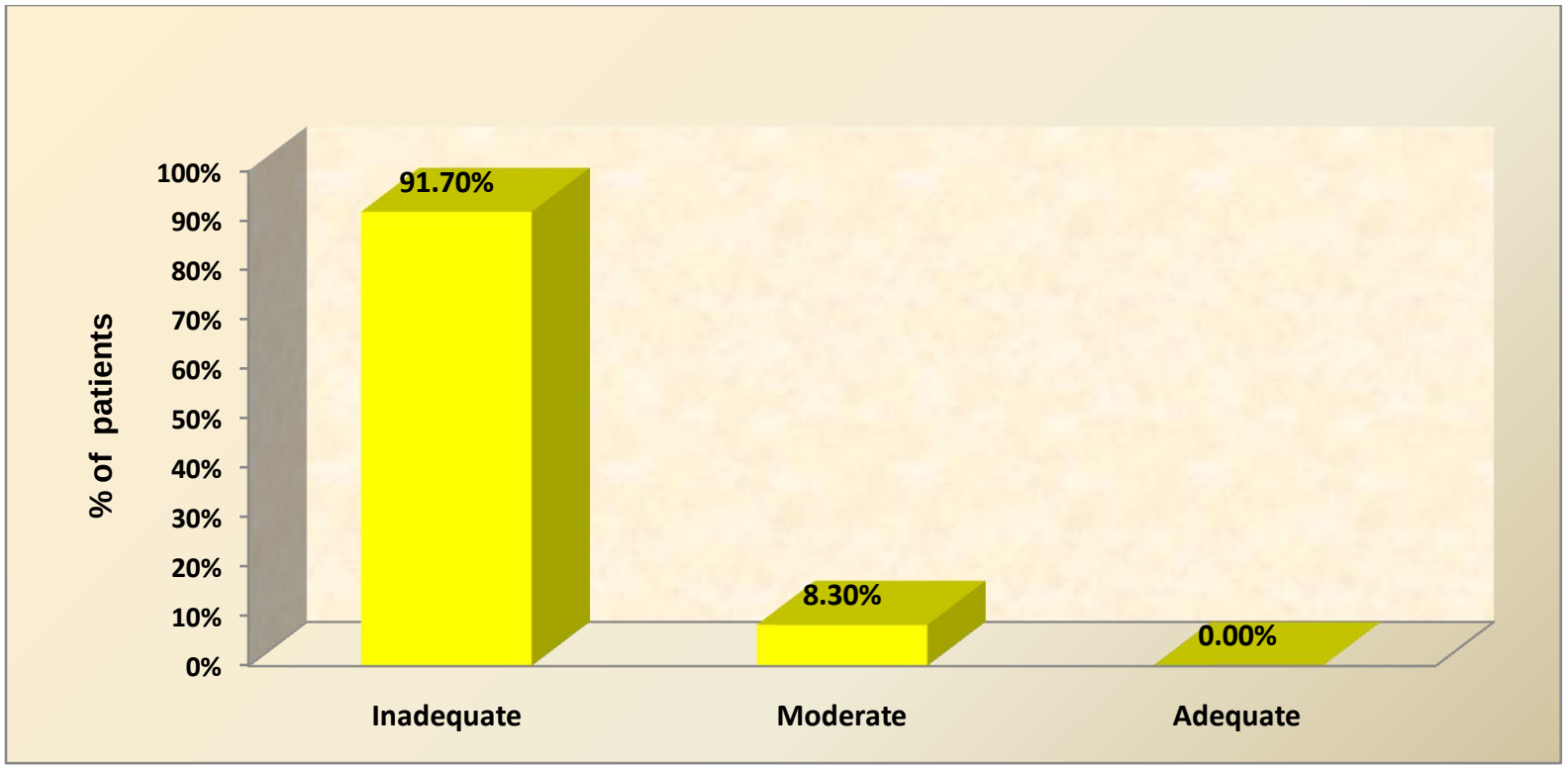


FIG 4.11 Distribution of level of pre-test knowledge study participants

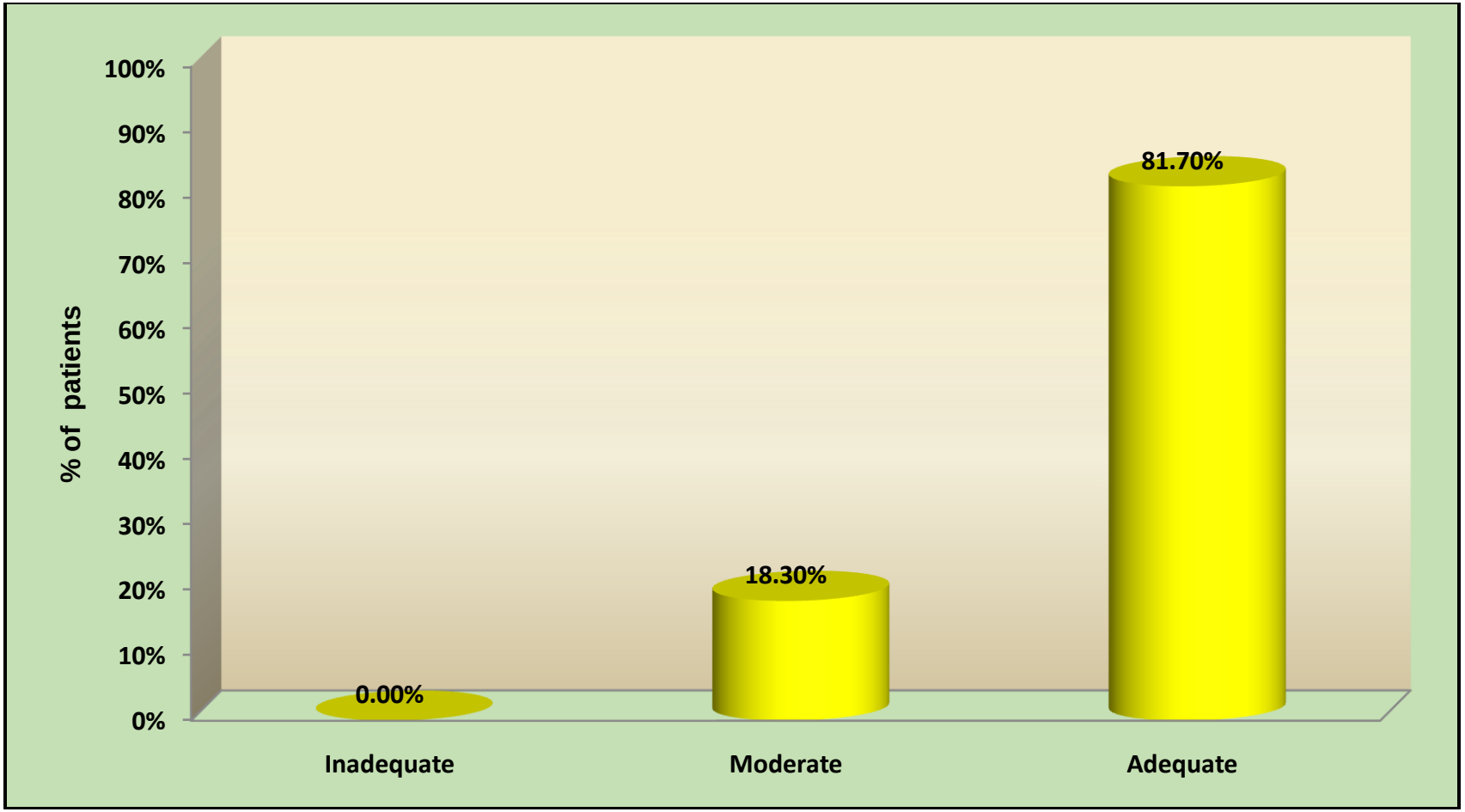


Fig .4.12 level of post-test knowledge of study participants

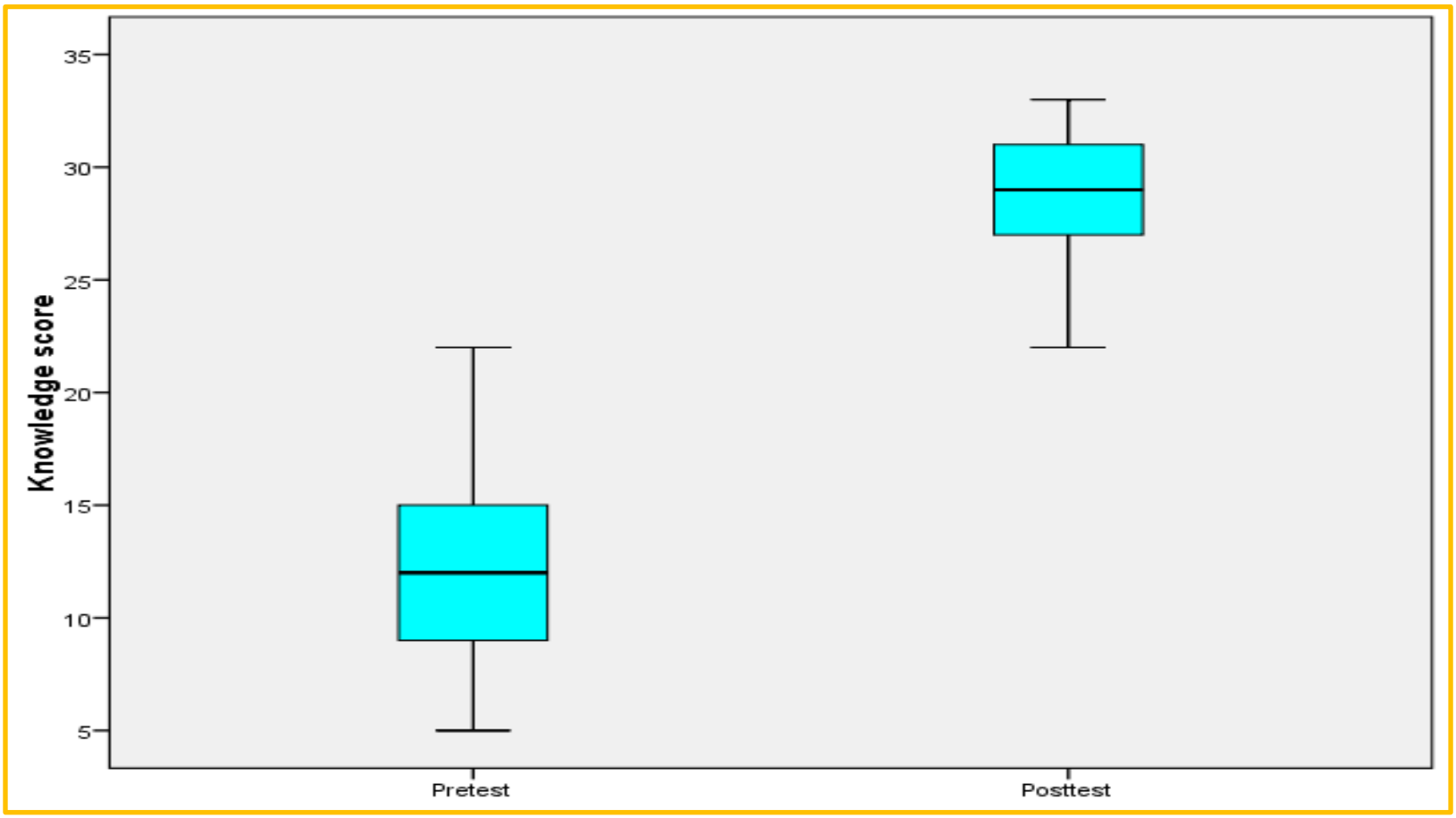


Fig 13: Box Plot Compares the pre-test and post-test knowledge score on rehabilitation among the patients

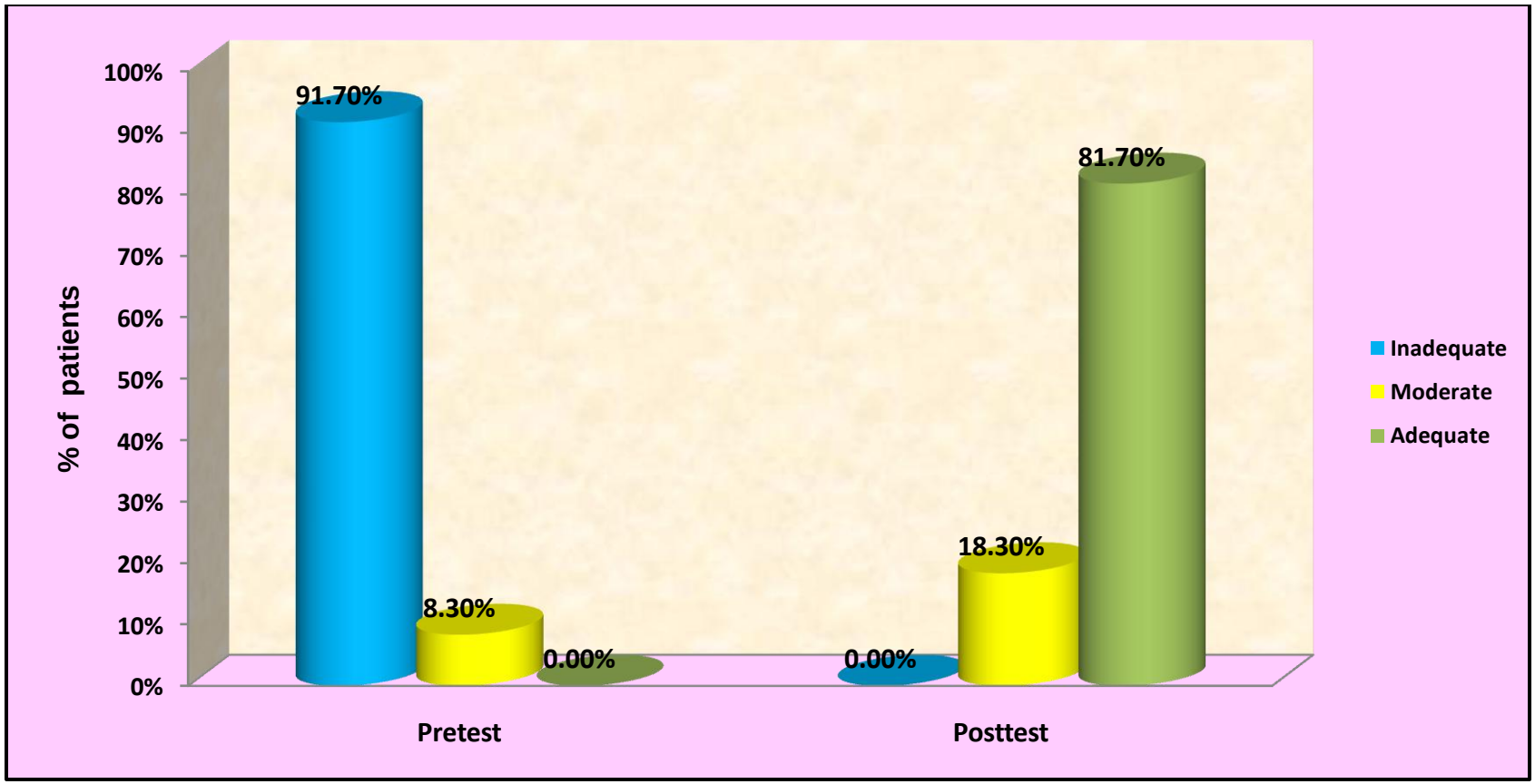


Fig 4.14 pre-test and post-test level of knowledge score of the study participants

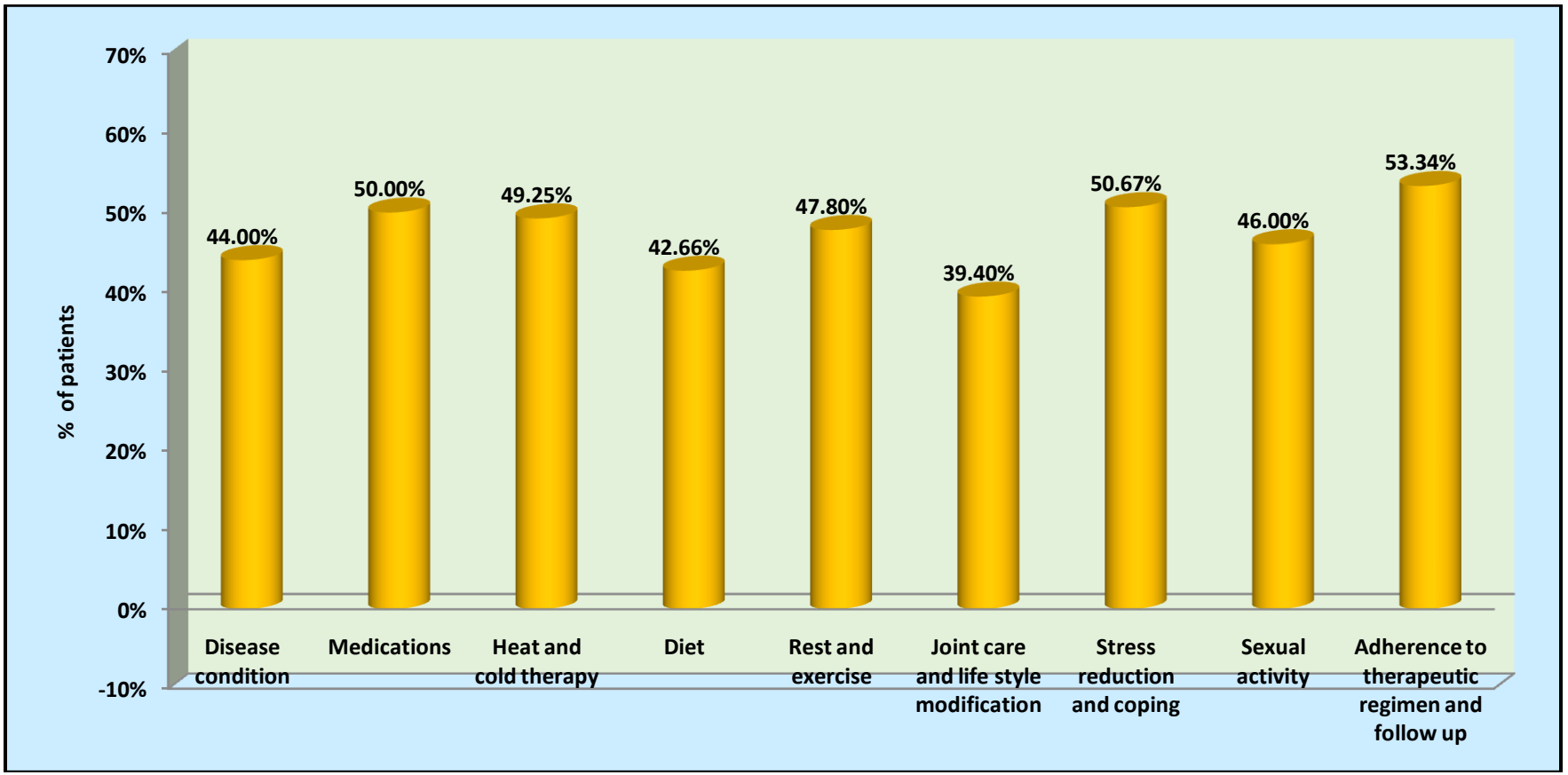


Fig 4.15 Each domain wise percentage of knowledge gain

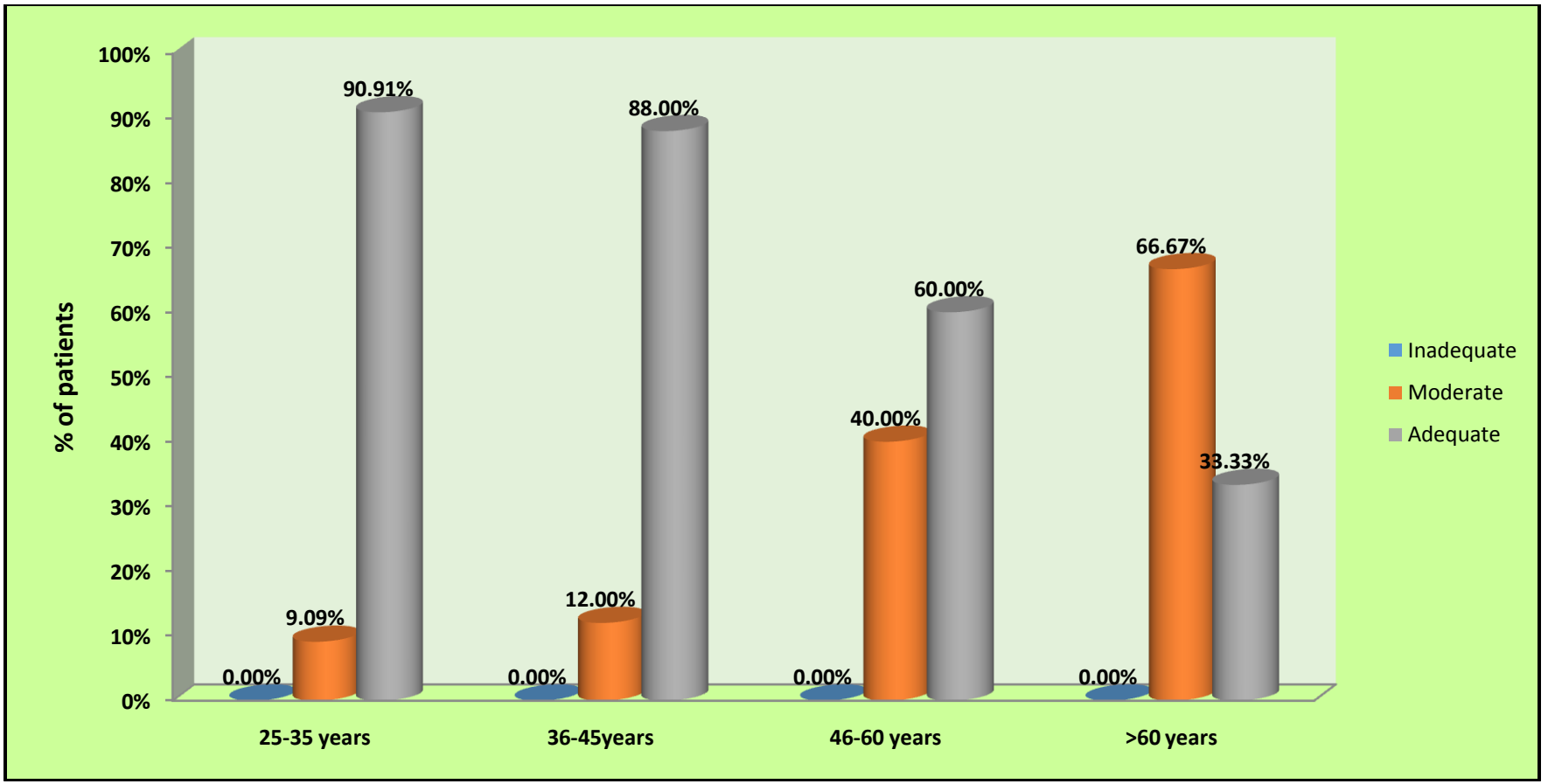


Fig .4.16 Association between post-test level of knowledge score and age of the study participants

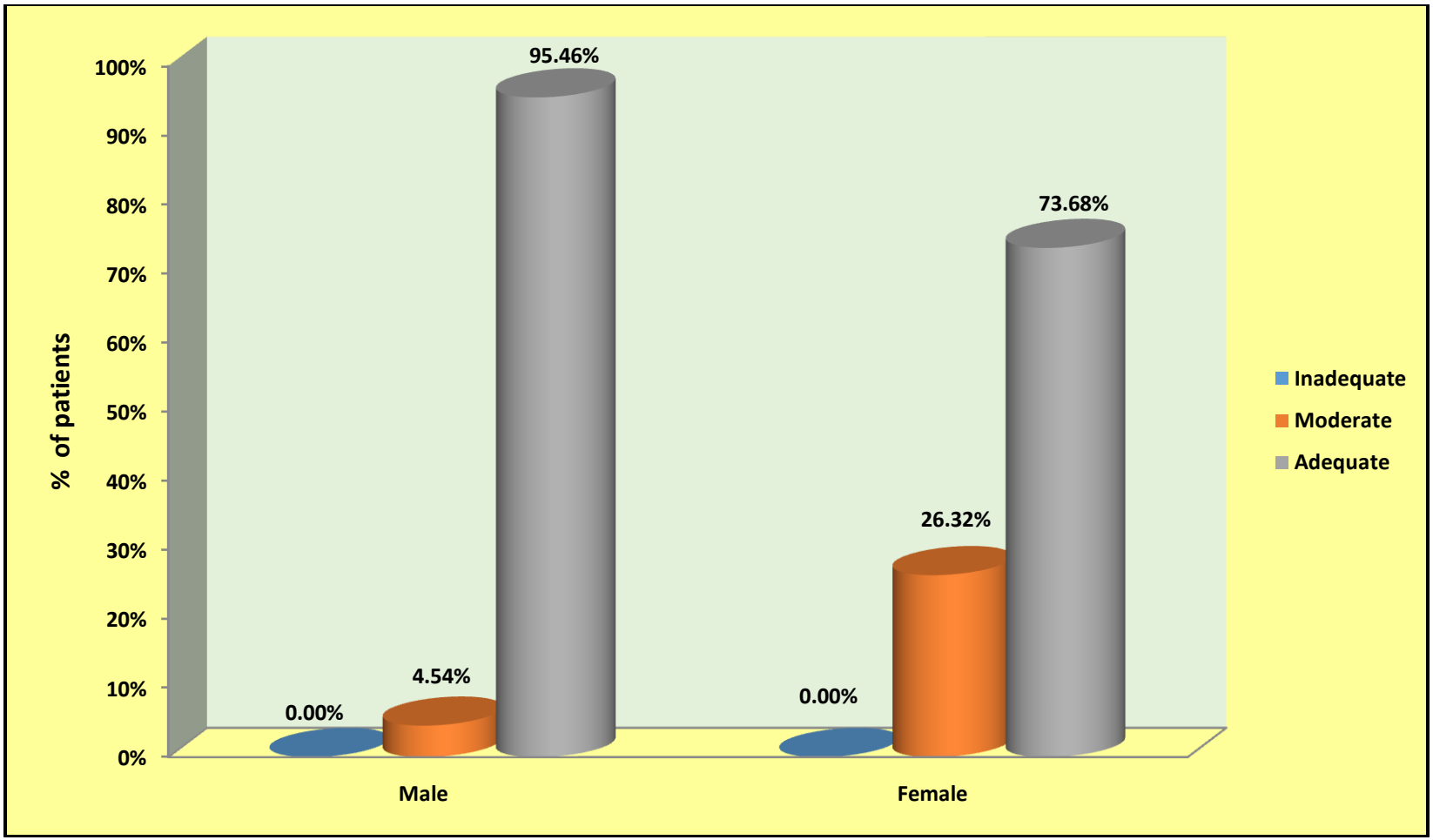


Fig.4.17 Association between post-test level of knowledge score and gender of patients of the study participants

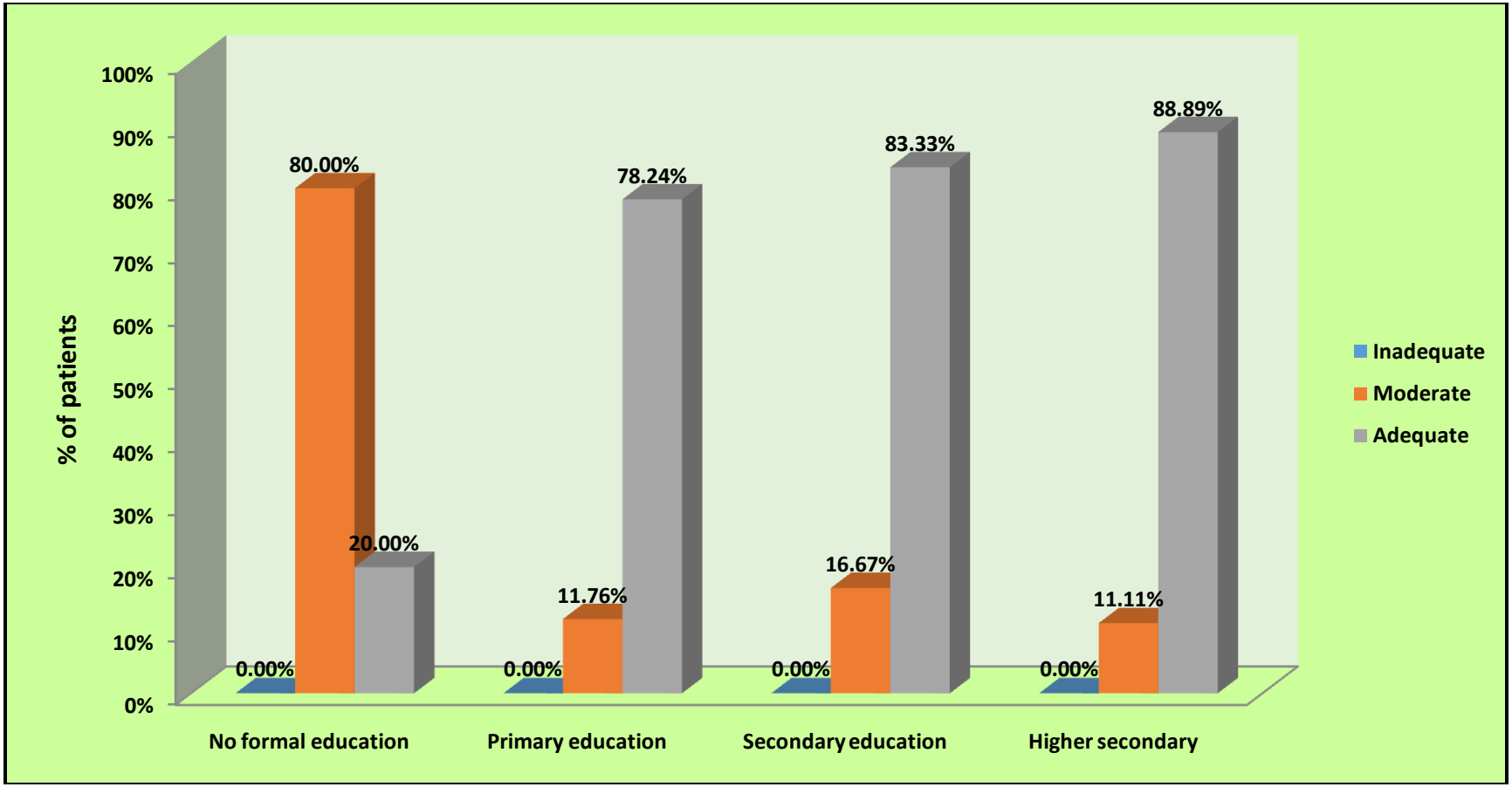


Fig.4.18 Association between post-test level of knowledge score and educational status of the study participants

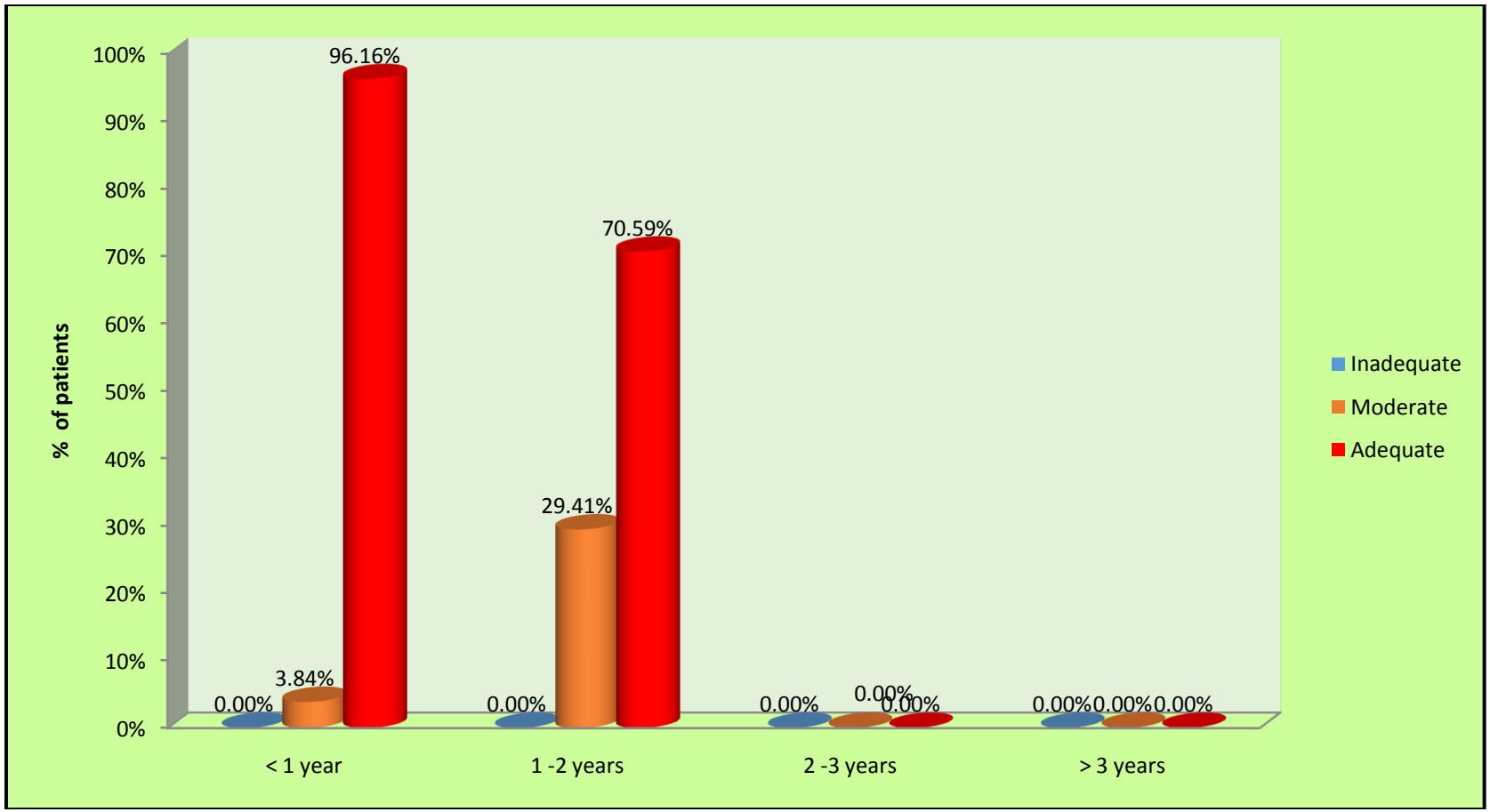


Fig ,4.19 Association between post-test level of knowledge score and duration of illness of the study participants

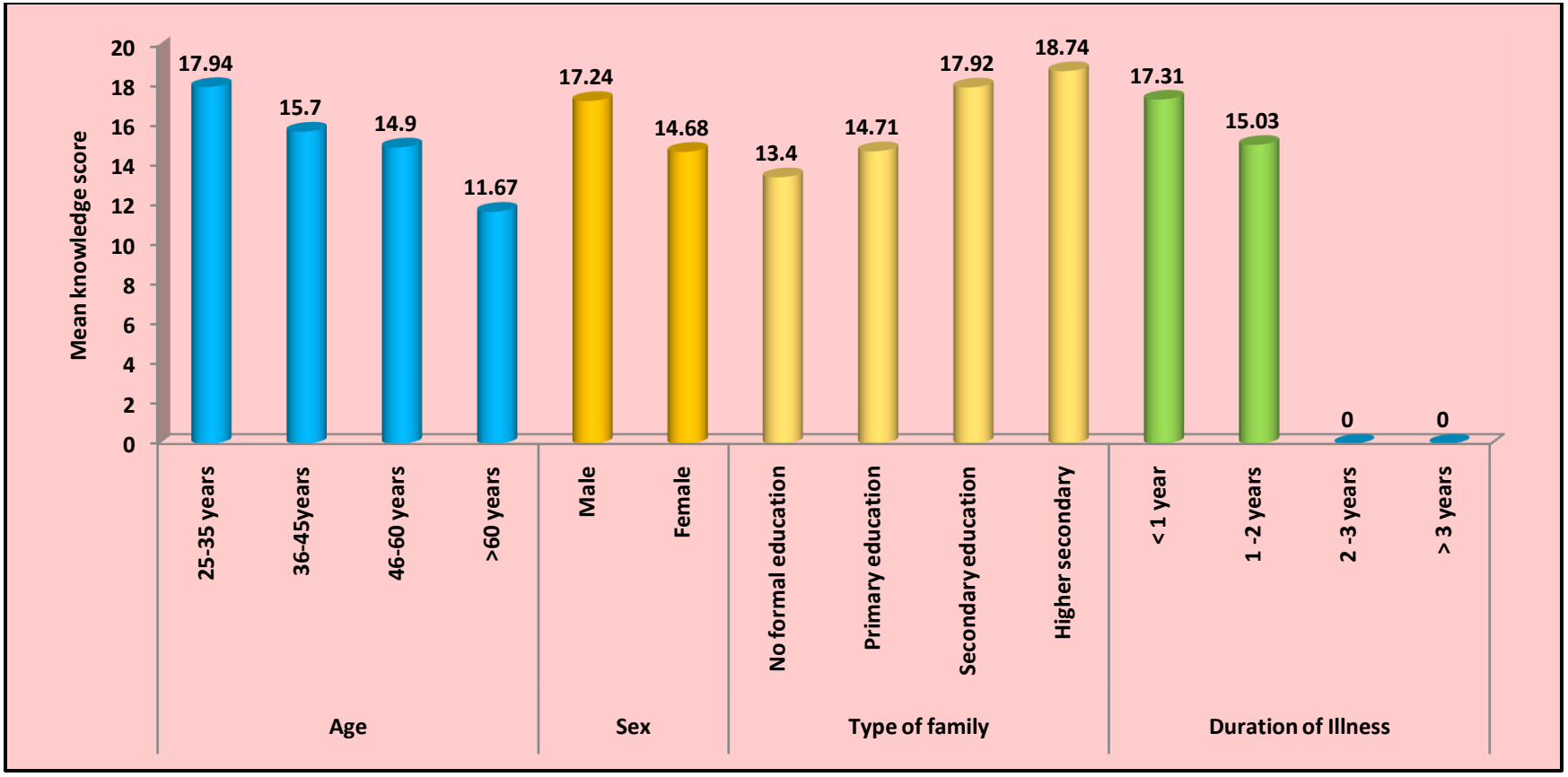


Fig 4.20 Association between selected demographic variables and post-test knowledge score of the study participants

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INSTITUTIONAL ETHICS COMMITTEE
MADRAS MEDICAL COLLEGE, CHENNAI 600 003

EC Reg.No.ECR/270/Inst./TN/2013
Telephone No.044 25305301
Fax: 011 25363970

CERTIFICATE OF APPROVAL

To

V.Muthulakshmi
M.Sc. (N) I Year Student
College of Nursing
Madras Medical College
Chennai 600 003

Dear V.Muthulakshmi,

The Institutional Ethics Committee has considered your request and approved your study titled **"A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING REHABILITATION AMONG PATIENTS WITH RHEUMATOID ARTHRITIS IN RHEUMATOLOGY WARD AT RGGGH, CHENNAI 3 " - NO.05072017**

The following members of Ethics Committee were present in the meeting hold on **11.07.2017** conducted at Madras Medical College, Chennai 3

1. Prof.Dr.C.Rajendran, MD.,	:Chairperson
2. Prof.R.Narayana Babu,MD.,DCH., MMC,Ch-3	: Deputy Chairperson
3. Prof.Sudha Seshayyan,MD., Vice Principal,MMC,Ch-3	:Member Secretary
4. Prof.S.Mayilvahanan,MD,Director,Inst. of Int.Med,MMC, Ch-3	: Member
5. Prof.A.Pandiya Raj,Director, Inst. of Gen.Surgery,MMC	: Member
6. Prof.Rema Chandramohan,Prof.of Paediatrics,ICH,Chennai	: Member
7. Prof. Susila, Director, Inst. of Pharmacology,MMC,Ch-3	: Member
8.Thiru S.Govindasamy, BA.,BL,High Court,Chennai	: Lawyer
9.Tmt.Arnold Saulina, MA.,MSW.,	:Social Scientist
10.Tmt.J.Rajalakshmi, JAO,MMC, Ch-3	: Lay Person

We approve the proposal to be conducted in its presented form.

The Institutional Ethics Committee expects to be informed about the progress of the study and SAE occurring in the course of the study, any changes in the protocol and patients information/informed consent and asks to be provided a copy of the final report.

Member Secretary – Ethics Committee

MEMBER SECRETARY
INSTITUTIONAL ETHICS COMMITTEE
MADRAS MEDICAL COLLEGE
CHENNAI-600 003

CERTIFICATE OF CONTENT VALIDITY

This is to certify that the tool constructed by Muthulakshmi.v M.Sc., (Nursing) II year, College of Nursing, Madras Medical College which is to be used in his study titled, "A study to assess the effectiveness of structured teaching programme on knowledge regarding rehabilitation among patients with rheumatoid arthritis in rheumatology ward at RAJIV GANDHI GOVERNMENT GENERAL HOSPITAL,Chennai-3 " has been validated by the undersigned. The suggestions and modifications given by me will be incorporated by the investigator in concern with their respective guide. Then he can proceed to do the research.

Signature with seal

Apollo College of Nursing
Apollo College of Nursing
Chennai - 600 095

Name: Mrs, Lizy Sonia

Designation: Vice Prinicipal

College: Apollo college of Nursing,Chennai.95

Place:

Date:

Permitted to Carry out the study
13.12.17
Dr. T.N. TAMILSELVAM MD.,D.M.
REGISTRAR, IOR, MMC & RGGGH
Reg. No: 42267

REQUISITION LETTER

From

V. MUTHULAKSHMI

M.sc nursing II year,

College of the nursing,

Madras medical college,

Chennai-3

To

THE DIRECTOR OF RHEUMATOLOGY

Rajiv Gandhi government General Hospital,

Madras Medical College

Chennai -3.

Through the proper channel, The principal College of Nursing, Madras Medical college, Chennai-3

Respected Madam, / Sir

Sub: Requesting permission to conduct research at Rajiv Gandhi Government General hospital , Chennai -03

M.Sc Nursing II year student has to conduct the research study for the partial fulfillment of m.sc (N) programme. My topic is **"A study to assess the effectiveness of structure teaching programme on knowledge regarding Rehabilitation among patient with Rheumatoid Arthritis in Rheumatology ward RGGGH, chennai-3".** The data collection period is from 02.01.2018 to 27.01.2018 at 8 am – 4 pm. I assure that I will not disturb the routine activities of the inpatient ward/ department

with due respect, I request your good self to kindly permit me conduct this study.

Thanking you

Signature of H.O.D

Yours faithfully,

(V. MUTHULAKSHMI)

Encl : copy of institutional ethical committee approval letter

CERTIFICATE OF CONTENT VALIDITY

This is to certify that the tool constructed by MUTHULAKSHMI.V, M.Sc Nursing II year, College of Nursing, Madras Medical College which is to be used in her study titled **"A study to assess the effectiveness of structured teaching programme on knowledge regarding rehabilitation among patients with rheumatoid arthritis in rheumatology ward at RGGGH, Chennai-3".** Has been validated by the undersigned. The suggestion and modification given by me will be incorporated by the investigator in concern with their respective guide. Then she can proceed to do the research.

Signature with seal

20.1.18

Dr. T.N.TAMILSELVAM MD.,D.M.
REGISTRAR, IOR, MMC & RGGGH
Reg. No: 42617

Name : Dr. T.N.TAMILSELVAM., M.D.D.M

Designation : Registrar & Clinical Head
Institute of Rheumatology
Madras Medical College
CHENNAI- 600003

College :

20/1/18

Mrs. V.K.R. PERIYAR SELVI,M.Sc.(N),
LECTURER,
MEDICAL SURGICAL NURSING
COLLEGE OF NURSING, MMC, CHENNAI-3

(I/c HOD)

CERTIFICATE OF CONTENT VALIDITY

This is to certify that the tool constructed by Muthulakshmi.v M.Sc., (Nursing) II year, College of Nursing, Madras Medical College which is to be used in his study titled, "A study to assess the effectiveness of structured teaching programme on knowledge regarding rehabilitation among patients with rheumatoid arthritis in rheumatology ward at RAJIV GANDHI GOVERNMENT GENERAL HOSPITAL,Chennai-3 " has been validated by the undersigned. The suggestions and modifications given by me will be incorporated by the investigator in concern with their respective guide. Then he can proceed to do the research.

Signature with seal

PRINCIPAL
MADHA COLLEGE OF NURSING
MADHA NAGAR, KUNDRATHUR,
CHENNAI - 600 069
PHONE : 24780736

Name: Dr. B. Tamilarasi M.Sc(N), Ph.D

Designation: Prinicipal

College: Madha college of Nursing, Chennai

Place:

Date: 28 DEC 2017

MADHA COLLEGE OF NURSING
CHENNAI - 600 069

CERTIFICATE FOR TAMIL EDITING

To whom so ever it may concern. This is to certify that the dissertation work. **"A study assess the effectiveness of structured teaching programme on knowledge regarding rehabilitation among patients with rheumatoid arthritis in rheumatology ward' 'at Rajiv Gandhi Government General Hospital Chennai 03,**done by MS .V,muthulakshmi ,II year M.Sc. (N) student, College of Nursing ,Madras Medical College ,Chennai 03 is edited for Tamil language appropriateness.

Signature

Designation

Seal

CERTIFICATE FOR ENGLISH EDITING

To whom so ever it may concern. This is to certify that the dissertation work. **"A study assess the effectiveness of structured teaching programme on knowledge regarding rehabilitation among patients with rheumatoid arthritis in rheumatology ward' 'at Rajiv Gandhi Government General Hospital Chennai 03**,done by MS .V,muthulakshmi ,II year M.Sc. (N) student, College of Nursing ,Madras Medical College ,Chennai 03 is edited for English language appropriateness.

Signature

Designation

Seal

N. PARANDHAMAN, M.A.,M.Ed.,M.Phil.,
B.T. Assistant. (English)
Govt. High School,
Kokkalur - 635 810. Vlr. Dt.

INTERVIEW SHEDULE (ENGLISH)

SECTION-1

PURPOSE:

The profile is used to measure the demographic variables regarding rehabilitation among patients with Rheumatoid arthritis

INSTRUCTIONS:

Read the following items carefully and select one correct response by placing appropriate tick mark on the space provided. Please be frank in answering .It will be kept confidential and anonymity will be maintained

DEMOGRAPHIC VARIABLES

1) Age in years **[ ]**

a)25-35 years

b)36-45years

c)46-60 years

d)>60 years

2) Sex **[ ]**

a)Male

b)Female

3) Religion **[ ]**

a)Hindu

b)Muslim

c) Christian

d)Others

4) Marital status **[ ]**

a)Married

b)Unmarried

c)Widow

d)Divorced

5)Educational status **[ ]**

a)No formal education

b)Primary

c)Secondary

d)Higher secondary

6)Occupational status **[ ]**

a)Heavy worker

b)Moderate worker

c)Sedentary worker

d)Not working

7)Monthly income of the family **[ ]**

a)Rs.<1000

b)Rs .1001-2000

c)2001-3000

d)>Rs.3001

8)Type of family **[ ]**

a)Nuclear family

b)Joint family

9)Duration of illness **[ ]**

a)<1year

b)1-2 years

c)2-3 years

d)>3years

10)Area/location **[ ]**

a)Urban

b)Rural

c) Sub urban

SECTION-2

SEMI STRUCTURED QUESTIONNAIRE ON KNOWLEDGE REGARDING REHABILITATION AMONG PATIENTS WITH RHEUMATOID ARTHRITIS

INSTRUCTIONS:

The semi structured interview schedule consists multiple choice questions .Each containing 3 options providing information. Read the questions carefully and select one correct response by placing appropriate tick mark on the space provided .The correct response carries one mark .Please by frank in answering .It will be kept confidential and anonymity is maintained

A)DISEASE CONDITION:

1)The rheumatoid arthritis is the inflammation of [ ]

a)Bones

b)Joints

c)Muscles

2)The cause for rheumatoid arthritis is [ ]

a)Severe work

b)Cold weather

c)Auto immune

3)The most clinical features of rheumatoid arthritis is [ ]

a)Morning stiffness

b)Hair loss

c)Overweight

4)The blood test which helps to assess the active rheumatoid arthritis is [ ]

a)Blood proteins

b)Erythrocytes sedimentation rate

c)Plasma viscocity

5)The common completion which occurs the rheumatoid arthritis is [ ]

a)Deformity

b)Tremor

c)Obesity

B)MEDICATIONS

6)The example for DMRADs(Disease modifying anti rheumatoid drugs)is [ ]

a)Paracetamol

b)Methotrexate

c)Voveran

7)The pain relieving medications should be taken [ ]

a)Before pain starts

b)With mild pain

c)With moderate pain

8)The side effects of anti inflammatory drugs is [ ]

a)Ulcer in stomach

b)Head ache

c)Dry mouth

9)The patient should visit a opthalmologist while taking hydroxychloroquine is between [ ]

a)3months

b)6months

c)12months

C)HEAT AND COLD THERAPY

10)The best treatment for joints which is swollen, painful and stiff is [ ]

a)Hot and cold application

b)Vigrous exercise

c)Continuing regular work

11)The duration of hot application over the painful joint is [ ]

a)5minutes

b)11-20 minutes

c)>30 minutes

12)The action of cold therapy is rheumatoid arthritis is [ ]

a)Increased the pain

b)Increased swelling

c)Reduced the pain and edema

13)The heat or cold therapy is contraindicated in patient who [ ]

a)Have severe pain

b)Have severe swelling

c)Cannot appreciate sensation

DIET

14)The diet prescribed or taken for rheumatoid arthritis patient is [ ]

a)Balanced diet

b)Carbohydrate restricted diet

c)Proteinless diet

15)The patient can reduce the weight by taking less amount of [ ]

a)Carbohydrate

b)protein

c)Fat

16)The Omega -3 fatty acid which is present in [ ]

a)Fish oil

b)Fruits

c)Vegetables

REST AND EXEXCISE

17)Exercise will help to **[ ]**

a)Reduced pain

b)Cure the disease

c)Increase the swelling

18)The suitable exercise for rheumatoid arthritis patient is **[ ]**

a)Jogging,yoga

b)Range of motion exercise

c)All of the above

19The correct time for doing exercise is **[ ]**

a)Before food

b)Immediately after food

c)At any time

20)Endurance exercise helps to **[ ]**

a)Decreased muscle strength

b)Strengthen heart muscle

c)Increase weight

21)The patient should not use pillow under the knees **[ ]**

a)pain will reduced

b)pain will increased

c)joint deformity will occur

JOINT CARE AND LIFE STYLE MODIFICATION:

22)Splint can be used to **[ ]**

a)Prevent joint deformity

b)To prevent swelling

c)To prevent injury

23)Resting splints can be used during **[ ]**

a)No pain in joints

b)No swelling in joints

c)Severe pain in joints

24)The method of hand joint protection is **[ ]**

a)Use palm of your hands not your finger when opening a jar

b)Use dish cloth

c)Keep joints in same position for a long time

25)The method of knee joint protection is **[ ]**

a) Sit on the floor with legs straight

b)Sit on the chair with foot rest

c)Sit on the floor with knees bend

26)The footwear used by the rheumatoid arthritis patient is **[ ]**

a)High heels

b)Large size sandals

c)Correct sized flat sandals

STRESS REDUCTION AND COPING

27)One of the following is the correct way of handling stress is **[ ]**

a)Regular aerobic exercise

b)Cigarette smoking

c)Isolation

28)The nutritional role is stress reduction is **[ ]**

a)Vitamin

b)Carbohydrates

c)Protein

29)The best method of which helps to improve the coping is **[ ]**

a)Social support

b)No relaxation

c)Medication

H.SEXUAL ACTIVITY:

30)The best method of alleviating joint pain during sexual activity is [ ]

a)Precede sex by warm bath

b)Precede sex after massaging the joint vigorously

c)Precede after vigorous exercise

31)The rheumatoid arthritis patient can [ ]

a)Take pain medication before sexual act

b)Take pain medication after sex

c)Avoid sexual activity during joint pain

32)The measures to be taken after sexual activity is [ ]

a)Rest

b)Continue work

c)Take bath

ADHERENCE TO THERAPEUTIC REGIMEN AND FOLLOW UP

33)The rheumatoid arthritis patients with no complication can [ ]

a)Reduce the medication dose

b)Stop one medication/two medication

c)Ask the doctor for reducing /increasing the medication dose

34)The exercises should be done [ ]

a)During no pain

b)Every day

c)During severe pain

35)Follow up should be done [ ]

a)If there is a problem

b)As per physicians advice

c)Whenever you feel like

KEY NOTES

QUESTIONS	ANSWERS
1	A
2	C
3	A
4	B
5	A
6	B
7	A
8	A
9	C
10	A
11	B
12	C
13	C
14	A
15	C
16	A
17	A
18	C
19	C
20	B
21	C
22	A
23	A
24	A
25	A
26	C
27	A
28	A
29	A
30	A
31	B
32	C
33	C
34	B
35	B

செவிலியர் கல்லூரி

சென்னை மருத்துவக் கல்லூரி, சென்னை-3

கற்பித்தலுக்கு முன் விண்ணப்ப படிவம்

மருத்துவ உள்நோயாளிகள் பிரிவில் சிகிச்சைக்காக வரும் மூட்டு அழற்சி உள்ள நோயாளிகளுக்கு விழிப்புணர்வு பற்றிய சமூக குடியியல் விவரங்கள்.

நோக்கம்

மூட்டு அழற்சி உள்ள நோயாளிகளின் சமூகக் குடியியல் விவரங்களை தெரிந்துகொள்வதற்கு வயது, பாலினம், மதம், திருமண நிலை, கல்வித் தகுதி, தொழில்சார் நிலை, மாதாந்திர குடும்ப வருமானம், உணவு பழக்கம், உடற்பயிற்சி முறை, வாழ்க்கை முறை, வசிக்கும் இடம் போன்ற தகவல்கள் பயன்படுத்தப்படுகிறது.

விதிமுறைகள்

பின்வரும் வினாக்களை கவனமாக படித்து பொருத்தமான (✓) குறியின் மூலம் ஒரு சரியான பதிலை தேர்ந்தெடுக்கவும். தயவு செய்து பதில் சொல்லுங்கள். உங்கள் தகவல் இரகசியமாக பாதுகாக்கப்படும்.

சுய சமூகக் குறிப்பு

1) வயது

அ) 25-35 வருடங்கள் ☐

ஆ) 36-45 வருடங்கள் ☐

இ) 46-55 வருடங்கள் ☐

ஈ) 55 வருடங்களுக்கு மேல் ☐

2) பாலினம்

அ) ஆண் ☐

ஆ) பெண் ☐

3) சமயம்

அ) இந்து ☐

ஆ) இஸ்லாமியர்கள் ☐

இ) கிறிஸ்துவர் ☐

ஈ) பிற சமயத்தவர் ☐

4) திருமணத் தகுதி

அ) திருமணமானவர் ☐

ஆ) திருமணமாகாதவர் ☐

இ) விதவை ☐

ஈ) விவாகரத்தானவர் ☐

5) கல்வித்தகுதி

அ) படிக்காதவர் ☐

ஆ) ஆரம்பக் கல்வி ☐

இ) உயர்நிலைக் கல்வி ☐

ஈ) மேல்நிலைக் கல்வி ☐

6) தொழில்

அ) கடின வேலையாளர் ☐

ஆ) தினக்கூலி வேலையாளர் ☐

இ) மேலோட்ட வேலையாளர் ☐

ஈ) வேலையில் இல்லை ☐

7) குடும்ப மாத வருமானம்

அ) ரூ.5000க்குள் ☐

ஆ) ரூ.5001 முதல் ரூ.10000 ☐

இ) ரூ.10001 முதல் ரூ.2000 ☐

ஈ) 2000க்கு மேல் ☐

8) குடும்ப வகை

அ) தனிக்குடும்பம் ☐

ஆ) கூட்டுக்குடும்பம் ☐

9) நோயால் பாதிக்கப்பட்ட காலம்

அ) 1 வருடத்திற்கு கீழ் ☐

ஆ) 1-2 வருடங்கள் ☐

இ) 2-3 வருடங்கள் ☐

ஈ) 3 வருடத்திற்கு மேல் ☐

10) இருப்பிடம்/ வாழ்விடம்

அ) நகர்ப்பகுதி ☐

ஆ) கிராமப் பகுதி ☐

இ) புறநகர் பகுதி ☐

செவிலியர் கல்லூரி

சென்னை மருத்துவக் கல்லூரி, சென்னை-3

கற்பித்தலுக்கு பின் திறனாய்வு கேள்விகள்

நோக்கம்

மூட்டு அழற்சி உள்ள நோயாளிகளுக்கான புணர்- சீரமைப்பு நலக்கல்வியின் திறனை ஆய்வு செய்தல்.

அறிவுறுத்தல்

1. கீழே கொடுக்கப்பட்டுள்ள கேள்விகளுக்கு பதிலை தேர்ந்தெடுக்கும்.
2. சரியான பதிலை (✓) குறியிடவும்.
3. உங்களின் பதில்கள் இரகசியம் காக்கப்படும்.

பகுதி-2: புணர் நிர்மாணம் பற்றிய அறிவு

அ.நோய்

1) முடக்கு வாத மூட்டழற்சி நோய் என்றால் என்ன?

அ) எலும்பில் அழற்சி ஏற்படுவது ☐

ஆ) சிறுமூட்டில் அழற்சி ஏற்படுவது ☐

இ) தசையில் அழற்சி ஏற்படுவது ☐

2) முடக்குவாத மூட்டழற்சி வருவதற்கான காரணம் என்ன?

அ) அதிக வேளைப்பளு ☐

ஆ) குளிர்கால நிலை ☐

இ) தன்னுடல் தாங்கு திறன் ☐

3) முடக்கு வாத மூட்டழற்சியின் முக்கிய அறிகுறி?

அ) அதிகாலை மூட்டுகளில் ஏற்படும் விறைப்பு ☐

ஆ) முடி உதிர்தல் ☐

இ) உடல் பருமன் ☐

4) உந்தப்பட்ட முடக்குவாத மூட்டழற்சியை கண்டறிய உதவும் இரத்தப் பரிசோதனை?

அ) இரத்தப் புரதம் ☐

ஆ) இரத்த சிகப்பணு படியும் அலகு ☐

இ) ஊநீர் பாகுநிலை ☐

5) முடக்குவாத மூட்டழற்சி நோயின் பின் விளைவுகள்?

அ) மூட்டு கோணல் ☐

ஆ) நடுக்கம் ☐

இ) உடல் பருமன் ☐

<u>ஆ. மருந்து மாத்திரைகள்</u>

6) நோய் மாற்று எதிர்ப்பு மூட்டழற்சி மருந்து வகைக்கான எடுத்துக்காட்டு

அ) பாராசிட்டமால் ☐

ஆ) மீத்தோட்ரெக்சேட் ☐

இ) ஓவிரான் ☐

7) வலி நிவாரணிகளை சாப்பிட வேண்டியது

அ) வலி தொடங்குவதற்கு முன் ☐

ஆ) மேலோட்டமான வலி இருக்கும் போது ☐

இ) சொற்ப வலி இருக்கும் போது ☐

8) வலி நிவாரணிகளால் வரும் முக்கிய விளைவுகள் என்ன?

அ) வயிற்றுப்புண் ☐

ஆ) தலைவலி ☐

இ) வாய் உலர்தல் ☐

9) முடக்குவாத மூட்டழற்சியாளர்கள், குளோரோகுயின் மாத்திரைகள் எடுக்கும் போது கண் மருத்துவரை அணுக வேண்டிய காலம்?

அ) மூன்று மாதங்களுக்கு ஒரு முறை ☐

ஆ) ஆறு மாதங்களுக்கு ஒருமுறை ☐

இ) பனிரெண்டு மாதங்களுக்கு ஒருமுறை ☐

இ. வெப்பம் மற்றும் குளிர் சிகிச்சை

10) வலி, வீக்கம் மற்றும் விரைப்பு உள்ள மூட்டுகளுக்கான தகுந்த மருத்துவம்

அ) வெப்பம் மற்றும் குளிர் ஒத்தடம் ☐

ஆ) சுறுசுறுப்பான உடற்பயிற்சி ☐

இ) அன்றாட வேலைகளை தொடர்தல் ☐

11) வலியுள்ள மூட்டுகளுக்கான வெப்ப ஒத்தடம் தரப்பட வேண்டிய கால நேரம்

அ) 5 நிமிடம் ☐

ஆ) 11-20 நிமிடம் வரை ☐

இ) 30 நிமிடத்திற்கு மேல் ☐

12) முடக்குவாத மூட்டழற்சிக்கு தரப்படும குளிர் சிகிச்சை வேலை செய்யும் விதம்

அ) வலியை அதிகரிக்கிறது ☐

ஆ) வீக்கத்தை அதிகப்படுத்துகிறது ☐

இ) வலியைக் குறைக்கிறது ☐

13) வெப்பம் மற்றும் குளிர் சிகிச்சை தவிர்க்கப்பட வேண்டியவர்கள்

அ) வலி அதிகம் உள்ளவர்கள் ☐

ஆ) வீக்கம் உள்ளவர்கள் ☐

இ) தொடு உணர்வு இல்லாதவர்கள் ☐

ஈ. உணவு முறைகள்

14) முடக்குவாத மூட்டழற்சிக்கு எடுத்துக்கொள்ள வேண்டிய உணவுகள்

அ) சீரான உணவு அல்லது சரிவிகித உணவு ☐

ஆ) கார்போஹைட்ரேட் இல்லாத உணவு ☐

இ) புரதம் இல்லாத உணவு ☐

15) முடக்குவாத மூட்டழற்சிகாரர்கள் எடை குறைவாக எடுத்துக்கொள்ள வேண்டிய குறைந்த உணவு

அ) கார்போஹைட்ரேட் ☐

ஆ) புரதம் ☐

இ) கொழுப்பு ☐

16) ஒமேகா எனப்படும் நல்ல கொழுப்பு அமிலம் இருக்கும் உணவுகள்

அ) மீன் எண்ணெய் ☐

ஆ) பழங்கள் ☐

இ) காய்கறிகள் ☐

<u>உ. ஓய்வு மற்றும் உடற்பயிற்சி</u>

17) உடற்பயிற்சி செய்தன் பயன்

அ) வலி குறைக்க ☐

ஆ) நோயை குணப்படுத்த ☐

இ) வீக்கம் அதிகரிக்க ☐

18) முடக்குவாத மூட்டழற்சி நோயாளிக்கு பொருத்தமான உடற்பயிற்சி

அ) ஜாகிங் உடற்பயிற்சி, யோகா உடற்பயிற்சி ☐

ஆ) எல்லை இயக்கம் உடற்பயிற்சி ☐

இ) மேலே கூறிய அனைத்தும் ☐

19) உயற்பயிற்சி செய்ய சரியான நேரம்

அ) உணவுக்கு முன் ☐

ஆ) உடனடியாக உணவு எடுத்த பின்னர் ☐

இ) எந்த நேரத்திலும் ☐

20) முடக்குவாத மூட்டழற்சிக்கு பொறுமையான உடற்பயிற்சி எதற்கு உதவும்

அ) தசை வலிமை குறைப்பதற்கு ☐

ஆ) இதய தசை வலுப்படுத்த ☐

இ) எடை அதிகரிக்க ☐

21) முழங்கால் மூட்டுக்கு கீழ் தலையணை வைப்பதால் வரும் விளைவு

அ) வலி அதிகரிக்கும் ☐

ஆ) வீக்கம அதிகரிக்கும் ☐

இ) மூட்டுக்கோணல் ☐

ஊ) மூட்டு பாதுகாப்பு மற்றும் வாழ்க்கை முறை மாற்றம்

22) சிம்பு உபயோகப்படுத்துவதால்

அ) மூட்டு கோணலை தவிர்க்கலாம் ☐

ஆ) நடப்பதை தவிர்க்கலாம் ☐

இ) தூக்கத்தை தவிர்க்கலாம் ☐

23) ஓய்வு சிம்புவை பயன்படுத்துவது

அ) மூட்டுகளில் வலி இல்லாதபோது ☐

ஆ) மூட்டுகளில் வீக்கம் இல்லாத போது ☐

இ) மூட்டுகளில் அதிக வலி உள்ளபோது ☐

24) கை மூட்டுகளை பாதுகாக்கும் முறை

அ) ஜாடியை திறக்கும்பொழுது விரல்களை உபயோகிக்காமல் உள்ளங்கையை உபயோகித்தல் ☐

ஆ) மூட்டுகளை ஒரே நிலையில் அதிக நேரம் வைத்தல் ☐

இ) துணியை உபயோகித்தல் ☐

25) முழங்கால் மூட்டுகளை பாதுகாக்கும் முறை

அ) காலை நீட்டி தரையில் அமருதல் ☐

ஆ) நாற்காலியில் உட்கார்ந்து கால்களை ஓய்வில் வைத்தல் ☐

இ) காலை மடித்து தரையில் அமருதல் ☐

26) முடக்குவாத மூட்டழற்சியாளர்கள் உபயோகிக்க வேண்டிய காலணி

அ) குதிகால் உயர் காலணி ☐

ஆ) பெரிய அளவு காலணி ☐

இ) சரியான அளவுள்ள சமதள காலணி ☐

ஊ) மன அழைத்தம்- குறைப்பு மற்றும் சமாளித்தல்

27) மன அழுத்தத்தை குறைக்க கையாளும் முறை

அ) இசை கேட்டல் ☐

ஆ) மருந்துகள் உபயோகித்தல் ☐

இ) தனித்திருத்தல் ☐

28) மன அழுத்தத்தை குறைக்கும் உணவு

அ) உயிர்சத்து ☐

ஆ) மாவுச்சத்து ☐

இ) புரதச்சத்து ☐

29) மன அழுத்தத்தை குறைக்க உதவும் சிறந்த முறை

அ) சமுதாய அரவணைப்பு ☐

ஆ) பொழுதுபோக்கின்மை ☐

இ) மருந்துகள் ☐

ஏ) பாலுணர்வு சம்பந்தமான செயல்கள்

30) முடக்குவாத மூட்டழற்சியாளர்கள் உடலுறவு கொள்ளும்போது மூட்டு வலியை குறைக்க

அ) உறவுகொள்ளும் முன் வெந்நீரில் குளித்தல் ☐

ஆ) உறவு கொள்ளும் முன் மூட்டுகளை வேகமாக தேய்த்துக் கொடுத்தல் ☐

இ) உறவுக்கு முன் அதிக உடற்பயிற்சி செய்தல் ☐

31) மூட்டழற்சியாளர்கள்

அ) வலி நிவாரணிகளை உடலுறவுக்கு முன் சாப்பிடவும் ☐

ஆ) வலி நிவாரணிகளை உடலுறவுக்கு பின் சாப்பிடவும் ☐

இ) உடலுறவை தவிர்த்தல் ☐

32) உடலுறவுக்கு பின் செய்ய வேண்டியது

அ) ஓய்வு எடுத்தல் ☐

ஆ) தொடர்ந்து வேலை செய்தல் ☐

இ) குளித்தல் ☐

ஐ) சிகிச்சை காப்புக்கான பத்தியம் மற்றும் தொடர் செயல்

33) முடக்குவாத மூட்டழற்சியாளர்களுக்கு தொந்தரவு இல்லாத போது

அ) தாமாக மருந்தின் அளவை குறைக்கலாம் ☐

ஆ) ஒன்று/ இரண்டு மாத்திரைகளை நிறுத்தலாம் ☐

இ) மருத்துவரின் ஆலோசனையை அணுகவும் ☐

34) உடற்பயிற்சி செய்ய வேண்டியது

அ) வலி இல்லாத பொழுது ☐

ஆ) அதிக வலி இருக்கும் போது ☐

இ) தினமும் ☐

35) தொடர் செயல் செய்ய வேண்டியது

அ) தொந்தரவுகள் இருக்கும் போது ☐

ஆ) மருத்துவரின் ஆலோசனைப்படி ☐

இ) தேவை என்று நினைக்கும் போது ☐

விடைத்தாள்

கேள்வி எண்.	பதில்
1.	அ
2.	இ
3.	அ
4.	ஆ
5.	அ
6.	ஆ
7.	அ
8.	அ
9.	இ
10.	அ
11.	ஆ
12.	இ
13.	இ
14.	அ
15.	இ
16.	அ
17.	அ
18.	இ
19.	இ
20.	ஆ
21.	இ
22.	அ
23.	அ
24.	அ
25.	அ
26.	இ

கேள்வி எண்.	பதில்
27.	அ
28.	அ
29.	அ
30.	அ
31.	ஆ
32.	இ
33.	இ
34.	ஆ
35.	ஆ

LESSON PLAN

ON

REHABILITATION REGARDING RHEUMATOID ARTHRITIS

LESSON PLAN ON REHABILITATION REGARDING RHEUMATOID ARTHRITIS

Topic	: Rehabilitation regarding rheumatoid arthritis
Duration	: 45 minutes
Group	: Patients with rheumatoid arthritis
Venue	: Rheumatology ward at Rajiv Gandhi Government General Hospital ,Chennai 03
Method of teaching	: Lecture cum discussion
Medium of instruction	: Tamil
Teaching aids	: Flash cards, Booklets, Phamplets

CENTRAL OBJECTIVE

The rheumatoid arthritis patients will acquire in depth knowledge regarding rehabilitation among rheumatoid arthritis in detail and to develop desirable attitudes and skills in rehabilitation among rheumatoid arthritis

SPECIFIC OBJECTIVE

The patient will be able to

- review the structure and functions of joints
- define rheumatoid arthritis
- risk factors and causes of rheumatoid arthritis
- explain the pathophysiology of rheumatoid arthritis
- state the clinical manifestations of rheumatoid arthritis
- mention the diagnostic evaluation of rheumatoid arthritis
- enlist the complication of rheumatoid arthritis
- discuss the management of rheumatoid arthritis

Summary

Till now we have seen about what is rheumatoid arthritis, causes of rheumatoid arthritis, clinical manifestations of rheumatoid arthritis, diagnostic findings of rheumatoid arthritis, management of rheumatoid arthritis. I hope it may be useful to the rheumatoid arthritis clients those who are admitted in rheumatology ward

Conclusion

Most patient experience little disability .So the rheumatoid arthritis rehabilitation will helps to prevent the further disability

S.No	Specific objectives	Contributory objectives	Teachers activity	Learners activity	A.v aids
1	Review the structure and functions of joints	**STRUCTURE AND FUNCTIONS OF JOINTS** A joint is the term used to describe the union of any two or more bones of the skeleton system. At the end of the joints there is cartilage. The articulating bones are surrounded by a tough, fibrous sheath called joint capsules the capsule is lined with a membrane, the synovial which secretes the lubricating and shock absorbing fluid. the main functions of joints are movement and maintains stability	Explaining	Listening	
2	Define rheumatoid arthritis	**RHEUMATOID ARTHRITIS** Rheumatoid arthritis is a chronic ,systemic, progressive, inflammatory connective tissue disorder affecting mainly the small peripheral joints in a pattern of systemic distribution	Explaining	Listening	Flash cards
		Incidence /Epidemiology It is more prevalent among the people between the ages 20-60 years with the peak incidence between			

		20 -50 years, the sex ratio of women and men is 3.1			
2	Etiology and risk factors of rheumatoid arthritis	**ETIOLOGY AND RISK FACTORS:** **The etiology of rheumatoid arthritis is unknown** Genetic basis Auto immune response Infective –Epstein barr virus arthritis is unknown **RISK FACTORS** Stress both physical and emotional	Explaining	listening	Flashcards
3	Explain the pathophysiology of rheumatoid arthritis	**PATHOPHYSOLOGY;** **4STAGES** Stage1:Synovitis Stage2;Pannus formation Stage3:Fibrous ankyloses Stage4:Bony ankyloses	explaining	listening	Charts
4	State the clinical manifestation of rheumatoid arthritis	**CLINICAL MANIFESTATIONS:** Morning stiffness in joints lasting more than 1hour	Explaining	Listening	Charts

		❖ Symmetrical pattern of affected joints ❖ Arthritis in three or more joint areas Rheumatoid nodules-subcutaneous nodules over bony prominence or external surfaces or in juxtra articular regions. **<u>OTHER FEATURES</u>** ❖ Tender, warm, swollen joints ❖ Fatigue ,occasional fever ,a general sense of not feeling well ❖ Arthritis in hand –swelling of wrist metacarpophalangeal or proximal interphalangeal joints Rheumatoid arthritis affects primarily synovial joint but also may involve the cervical spine,temporomandibular, sternoclavicular, manubriosternal, shoulder, elbow, hip and ankle joint and the criocoarytenoid cartilage of the larynx.	Explaining	listening	Charts
5	Mention the diagnostic	**<u>DAGNOSTIC EVALUATION</u>** Rheumatoid factors –positive	Explaining	Listening	Charts

6	evaluation of rheumatoid arthritis Enlist the complication of rheumatoid arthritis	Erythrocyte sedimentation rate –elevated ❖ C-reactive protein –elevated ❖ X-ray –determines the degree of destruction ❖ Synovial fluid analysis ❖ Anti nuclear anti body **<u>COMPLIICATIONS</u>** ❖ Vasculitis ❖ Lung disease –pleurisy ,nodules ,pulmonary fibrosis ❖ Cardiac disease-valvulitis Eye involvement –SJorgen's syndrome,sclerotic,episcleritis,nerve involvement ❖ Liver involvement-Hepatotoxicity ❖ Renal involvement ❖ Bone involvement – osteoporosis,Feltysyndrome	Explaining	Listening	Charts

7	Discuss the management of rheumatoid arthritis	**MANAGEMENT OF RHEUMATOOID ARTHRITIS** **1) MEDICATIONS;** **1)SYMPTAMATIC TREATMENT WITH NON STEROID ANTI INFLAMMATORY DRUGS:** Tab) Diclifenacsodium 50mg or cap) indomethacin these drugs are given in morning **Side effects** of these drugs mainly gastro intestional disturbances and these side effects can be reduced by taking with food and along with H2 blockers .eg.tab)Ranitidine or PPI (Proton pump inhibitors) eg.omeprazole **2)CORTICOSTEROIDS:** Oral corticosteroids eg,prednisolone is used in moderate doses to cause rapid improvement of synovitis as the traditional (DMARDs) will take time to become effective . Steroids should be titrated as per physicians advice to avoid side effects includes are osteoporosis, weight gain,risk of infection	Explaining	Listening	Booklets

		3)DISEASE MODIFYING ANTI RHEUMATOID DRUGS(DMARD): **a)Methotrxeate**(2.5mg or 10 mg tablets)or subcutaneous injection ❖ It should be taken once in a week(15 to 25mg) only after food ❖ To avoid milk products during the drugs of methotrexate administration ❖ If patient develops vomiting anti emetics or ondantron can be administered prior to methotrexate ❖ To decrease the side effects of methotrexate folic acid 5mg prescribed 24 hrs after taking methotrexate Contra indication to pregnancy and to stop the medications 3months prior to conception. **b)Chloroquine250mg** usually at night time in view of side effects to rule out the vision so the patient should undergo eye checkup annually It is very safe drug for pregnancy			

		c)Sulfa salazine(500mg) It will be given maximum as 4 tablets per day(2-morning and 2-evening) patient should go for blood test CBC, RFT,LFT For every week in 3monthhs and every 3 months after 1year 6 month once. **d)Leflunomide 2mg (10 -20mg/day)** Continuous blood pressure monitoring Contraindicated to pregnancy **Heat therapy and cold therapy** Hot pack application ;it should not be used for more than11 to 20mts ❖ Inspect the skin before and after use Contra indicated in patients who cannot appreciate heat/cold sensation **Procedure:** **1)Heat pack:** ❖ Place pack in a container and completely cover it with water Place the container on stove ,bring water to boil			

		and turn to low heat pack will be ready in 1 hour **2)Application:** ❖ Fold three heavy towels lengthwise ❖ Remove the pack from water using a spoon handle in one loop or kitchen tongs .use both hands to manipulate spoons or tongs ❖ Centre the pack on top of one of the folded towels wrap the pack in the towel, then repeat with other towels, there should be a six thickness of towel on all sides of the pack ❖ Place the wrapped pack on the joint, remove in 20 minutes The pack can then be placed on another joint remove a towel if the pack becomes cools. **3)Storage:** ❖ Store packs under water or freeze in your freezer for longer periods of disuse Towels may be reused when they have dried			

		Cold therapy Plastic bag pack ❖ Fill double plastic bag with ice ❖ Wrap the pack to warm, wet towel ❖ Keep ice pack on area for up to 20 mts if tolerated ❖ Remove pack ,dry skin thoroughly and check for injury. This therapy helps to make the blood vessels constrict and dilate which leads to reduce in edema and pain. **Diet** There is no specific dietary management ❖ High nutritious (balanced)diet ❖ Omega -3 fatty acid in fish helps in reduction of rheumatoid arthritis inflammation ❖ Control fat and cholesterol to reduce/prevent obesity Include vegetables ,fruits and grains			

		REST AND EXERCISE People with rheumatoid arthritis need a good balance between rest and exercise, with more rest when the disease is active and more exercise when it is not. **Rest** Shorter rest breaks every now and then are more helpful than long time spent in bed **Exercise** a)**Range of motion exercise**-These exercises helps to maintain joint movement ,relieve stiffness and flexibility. **b)Strengthening Exercise**-To maintain or increase muscle strength. **c)Endurance Exercise-**These aerobic exercises strengthen the heart ,give energy and control the body weights Eg; Walking, swimming and cycling Use some from of moist heat over painful joints for 15 -20 mts before performing the exercises.			

		Minimal aches and pains during exercise may indicate that the patient is benefiting from the exercise ,if the pain last for more than 1-2 hours after exercise ,patient have exercised too much ,do less next time. **<u>Finger and hand exercise</u>** ❖ Bend the fingers as in a first ,but keep your fingers in a relaxed positions move the wrist up and down ❖ Keep the fingers bent and circle the wrist, first one way ,then another ❖ Make the first ,tighten and relax. ❖ Straighten your finger and thumb ,span them as widely as you can. ❖ Touch the tip of each finger in turn with the thumb. ❖ Touch the base of the little finger with the thumb. ❖ Walk the finger on table.			

		❖ Stand in an upright position lift your hands above the head place hands on shoulders and make large circles Bend and straighten the hand at the elbow level **Leg exercises** ❖ Sit in a chair/lie down and straighten your leg and hold raise it up to your limit, then relax ,Repeat 5-10times in both legs ❖ Bend and straighten the leg at the knees ❖ Move the ankle joint up and down and rotate ❖ Flex and relax the toe fingers **JOINT CARE LIFE STYLE MODIFICATION:** Some people find using a splint for a short time around a painful joint reduce the pain and swelling.			

		There are many type of splints ❖ Resting splint when there is severe pain and swelling it will be prescribed for some days and then during day small exercises will be done followed by resting the joint by in night ❖ Functional splint; It can be used when the patients are doing their usual work ❖ Corrective /dynamic splint;It is used to prevent the deviation of the joint 1)Use large joints for work always try to use shoulders helps and knees to perform any task in order to relieve strain on small joints ❖ Use your entire hands to push cupboard door instead of using just your fingers ❖ Instead of using your hand or arm to close a drawer ,try using your hip/waist ❖ Try not to use your fingers or hand to close the lid of a container use your elbow ❖ Pick up a coffee cup with both hands rather than with one hand			

		❖ Avoid keeping joints in the same position for a long time , eg while holding a telephone or newspaper 2)Use correct size chapels and it should be flat 3)As far as possible sit on a chair rather than sitting on floor 4)When climbing the stair case use hand stick (or)hand bars of the stairs 5)Avoid excess leg sitting 6)Use western type toilet /commode 7)Bend your knees for lifting weight instead of bending the hip joints 8)Prefer flat surface for walking and use hand stick 9)Use flat bed and small pillow for head and don't keep pillow under knees **<u>STRESS REDUCTION AND COPING</u>** The techniques are ❖ Relaxation ❖ Hearing music			

		❖ Talking with people ,express the feelings ❖ Viewing television ❖ Avoid worrying about the disease, condition eat adequately ❖ Sleep 6-8hours per day ❖ Family members cooperation can reduce the stress **SEXUAL ACTIVITY** Pain and sexual pain activity are usually associated with rheumatoid arthritis ,measures to alleviate or control pain during sexual activity are ❖ Practice sex by a warm bath ❖ Practice range of motion exercise without resistance to promote comfortable movement Apply hot or cold application to painful joints 10-15 minutes before sexual activity to reduce swelling			

கட்டமைக்கப்பட்ட கற்பித்தல் திட்டம்

தலைப்பு	:	முடக்குவாத மூட்டு அழற்சி பற்றிய விழிப்புணர்வு
நேரம்	:	45 நிமிடம்
கூட்டம்	:	முடக்குவாத மூட்டு அழற்சி நோயாளிகள்
இடம்	:	முடக்குவாத மூட்டு அழற்சி பிரிவு, அரசு மருத்துவமனை, சென்னை.
பயிற்றுவிப்பவர்	:	வீ.முத்துலட்சுமி, முதுகலை செவிலிய மாணவி, இரண்டாம் ஆண்டு, செவிலியர் கல்லூரி, சென்னை மருத்துவக்கல்லூரி, சென்னை.
பயிற்றுவிக்கும் முறை	:	பயிற்றுவித்தல் மற்றும் கலந்துரையாடல்
பயிற்றுவிக்கும் மொழி	:	தமிழ்
பயிற்றுவிக்கும் பொருள்	:	விளக்கப்படங்கள் அடங்கிய அட்டைகள்

மைய குறிக்கோள்

முடக்குவாத மூட்டு அழற்சி விழிப்புணர்வு பற்றி நன்கு தெரிந்துகொண்டு அதை அன்றாட வாழ்க்கையில் நடைமுறைப்படுத்தலாம்.

சிறப்பு நோக்கங்கள்

வகுப்பு முடிவில் நோயாளிகள் அறிவது,

- முடக்குவாத மூட்டு அழற்சி என்றால் என்ன?
- முடக்குவாத மூட்டு அழற்சி வருவதற்கான காரணங்கள் என்ன?
- முடக்குவாத மூட்டு அழற்சி மூட்டுகளில் எப்படி பாதிப்பை ஏற்படுத்துகின்றது?
- முடக்குவாத மூட்டு அழற்சி நோயின் அறிகுறிகள் என்ன?
- முடக்குவாத மூட்டு அழற்சி நோய் எவ்வாறு கண்டறியப்படுகிறது?
- முடக்குவாத மூட்டு அழற்சியின் பக்கவிளைவுகள் என்ன?
- முடக்குவாத மூட்டு அழற்சியின் மருத்துவ முறைகள் என்ன?

முன்னுரை

அனைவருக்கும் வணக்கம். இன்று நான் உங்களுக்கு மூட்டு அழற்சி என்றால் என்ன, அதன் காரணங்கள், காரணிகள், அறிகுறிகள், பரிசோதனைகள் மற்றும் மருத்துவ குணங்கள் பற்றி கூறப்போகிறேன். நம்முடைய மூட்டுகளை பாதிக்கின்ற பல்வேறு பிரச்சனைகளில் முக்கியமான ஒன்று முடக்குவாத மூட்டு அழற்சி. இதனால் அவர்களுடைய சுய வேலையை வாழ்க்கை நடைமுறையை, அவர்களுடைய சுதந்திரம், பாதுகாப்பு, அவர்களுடைய பொது வாழ்க்கை மற்றும் சுற்றுப்புறம் அனைத்தையும் பாதிக்கின்றது. இந்நோய் 20ல் இருந்து 60 வயது உள்ளவரையும் பாதிக்கின்றது.

வ. எண்	நேரம்	குறிப்பான நோக்கங்கள்	பொருளடக்கம்	ஆராய்ச்சியாளர் செயல்	மாணவர்கள் செயல்கள்	ஒலி, ஒளி சார் உபகரணங்கள்	மதிப்பீடு
1.	2 நிமி	முடக்குவாத மூட்டு அழற்சி என்றால் என்ன?	**முடக்குவாத மூட்டு அழற்சி என்றால் என்ன?** முடக்குவாத மூட்டு அழற்சி என்பது மூட்டுக்குள் உள்ள இணைப்புத் திசுக்கள் இடம் மாறி, மூட்டு சவ்வு வீக்கம் அடைந்து மற்றும் மூட்டு நீர் அதிகரித்து உடலில் உள்ள சிறு மூட்டுகள் மற்றும் பெறு மூட்டுகளில் வலி, வீக்கம் வருவதையே முடக்குவாத மூட்டு அழற்சி என்கிறோம். **<u>முடக்குவாத மூட்டு அழற்சி யாரை அதிகமாக பாதிக்கும்?</u>** • முடக்குவாத மூட்டு அழற்சி பெண்கள் மற்றும் ஆண்களை பாதிக்கும். • 20ல் இருந்து 40 வயதிற்குட்பட்ட மக்கள் பெரும்பாலும் பாதிக்கப்படுகின்றனர். • ஆண்களில் வயதானோரும் கூட பாதிக்கப்படலாம்.	விவரித்தல்	கவனித்தல்	மின்னல் அட்டை	

வ. எண்	நேரம்	குறிப்பான நோக்கங்கள்	பொருளடக்கம்	ஆராய்ச்சியாளர் செயல்	மாணவர்கள் செயல்கள்	ஒலி, ஒளி சார் உபகரணங்கள்	மதிப்பீடு
2.	3 நிமி	முடக்குவாத மூட்டு அழற்சி வருவதற்கான காரணங்கள் என்ன?	**முடக்குவாத மூட்டு அழற்சி வருவதற்கான காரணங்கள் என்ன?** • காரணம் கண்டறியப்படவில்லை • பெரும்பாலும் நம்முடைய மரபணு மாற்றங்கள் முக்கிய காரணங்கள். • சில எதிர்வினை நோய் தொற்று காரணங்கள் • புகை பிடித்தல் மற்றும் மது அருந்துவதினால் காரணங்கள்.	விவரித்தல்	கவனித்தல்	மின்னல் அட்டை	
3.	5 நிமி	முடக்குவாத மூட்டு அழற்சி மூட்டுகளில் எப்படி பாதிப்பை ஏற்படுத்துகின்றது?	**முடக்குவாத மூட்டு அழற்சி எப்படி மூட்டுகளில் பாதிப்பு ஏற்படுத்துகிறது** முடக்குவாத மூட்டு அழற்சி நான்கு நிலைகளில் மூட்டுகளில் பாதிப்பு ஏற்படுத்துகிறது. • முதல் நிலை (மிக மிதமான பாதிப்பு) • இரண்டாம் நிலை (மிதமான பாதிப்பு) • மூன்றாம் நிலை (கடுமையான பாதிப்பு) • நான்காம் நிலை (மிகவும் கடுமையான பாதிப்பு)	விவரித்தல்	கவனித்தல்	மின்னல் அட்டை	

வ. எண்	நேரம்	குறிப்பான நோக்கங்கள்	பொருளடக்கம்	ஆராய்ச்சியாளர் செயல்	மாணவர்கள் செயல்கள்	ஒலி, ஒளி சார் உபகரணங்கள்	மதிப்பீடு
			<u>முதல்நிலை மிக மிதமான பாதிப்பு</u> மூட்டுகளில் சுற்றி இருக்கின்ற சவ்வில் அழற்சி ஏற்படுத்தி மிக மிதமான வலியை ஏற்படுத்தும். இதனை முதல் நிலை முடக்குவாத மூட்டு அழற்சி என்று கூறப்படுகிறது. **<u>இரண்டாம் நிலை (அதிகமான பாதிப்பு)</u>** அழற்சி அடைந்த அந்த மூட்டு உறை சவ்வில் இருந்து ஒரு அடர்த்தியான புதிய திசு உருவாகி வரும். இது மூட்டுக்குள் புகுந்து சவ்வுகளிலும், மூட்டுகளிலும் பாதிப்பு ஏற்படுத்துகிறது. இதனால் எலும்புகளில் லேசான உராய்வு ஏற்படுத்தி வலி மற்றும் வீக்கம் போன்ற பாதிப்புகள் வருகின்றன. **<u>மூன்றாம் நிலை (கடுமையான பாதிப்பு)</u>** இந்நிலையில் மூட்டு பாதிப்பு அதிகமாக இருக்கும். காரணம் மூட்டுகளை சுற்றி இருக்கின்ற திசுக்களின் வளர்ச்சி இரண்டாம் நிலையை விட அதிகமாக இருக்கும். இது ஒரு தழும்பு போல் காணப்படும். இந்நிலையில் மூட்டுகள் ஒழுங்கற்று காணப்படும். இதனால் மூட்டுக்களை அசைக்க முடியாது.				

வ. எண்	நேரம்	குறிப்பான நோக்கங்கள்	பொருளடக்கம்	ஆராய்ச்சியாளர் செயல்	மாணவர்கள் செயல்கள்	ஒலி, ஒளி சார் உபகரணங்கள்	மதிப்பீடு
			<u>நான்காம் நிலை (மிகவும் கடுமையான நிலை)</u> இந்த நிலையில் மிகவும் கடுமையான நிலை. மூட்டில் சவ்வை சுற்றி வளர்ந்த அடர்த்தியான திசுவின் வளர்ச்சி இன்னும் அதிகரித்து எலும்பு திசுவாக மாறிவிடும். இந்நிலையில் நம்முடைய மூட்டுக்களை அசைக்கவே முடியாது.				
4.	3 நிமி	முடக்குவாத மூட்டு அழற்சி நோயின் அறிகுறிகள் என்ன?	**முடக்குவாத மூட்டு அழற்சி நோயின் அறிகுறிகள்** முக்கியமாக சிறு மூட்டுக்கள் வீங்கும், மணிக்கட்டுகள், முழங்கைகள், முழங்கால் மூட்டு மற்றும் கணுக்கால் மூட்டுக்கள் வீங்கும் மற்றும் வலி ஏற்படும். இது ஆறு வாரங்களுக்கு மேல் நீடிக்கும். காலை எழுந்தவுடன் கைகளில் ஒரு இறுக்கத்தன்மை இருக்கும். இது அரைமணி நேரம் தாண்டி நீடிக்கலாம்.	விவரித்தல்	கவனித்தல்	மின்னல் அட்டை	

வ. எண்	நேரம்	குறிப்பான நோக்கங்கள்	பொருளடக்கம்	ஆராய்ச்சியாளர் செயல்	மாணவர்கள் செயல்கள்	ஒலி, ஒளி சார் உபகரணங்கள்	மதிப்பீடு
5.	5 நிமி	முடக்குவாத மூட்டு அழற்சி நோய் எவ்வாறு கண்டறியப் படுகிறது?	**முடக்குவாத மூட்டு அழற்சி நோய் கண்டறிதல்** • உடல் பரிசோதனையின் மூலம் கண்டறியலாம் • இது தவிர நோய் தொற்று ஏற்பட்டதை தெரிவிக்கிற மாதிரி CPR/ESR என்கிற இரண்டு பரிசோதனைகள் உதவுகின்றது. • எக்ஸ்-ரே, அல்ட்ராசவுண்ட், சி.டி., எம்.ஆர்.ஐ. போன்ற கருவிகள் மூலம் இந்நோயை கண்டறியலாம்.	விவரித்தல்	கவனித்தல்	மின்னல் அட்டை	
6.	2 நிமி	முடக்குவாத மூட்டு அழற்சியின் பக்கவிளைவுகள் என்ன?	**முடக்குவாத மூட்டு அழற்சியின் பக்கவிளைவுகள்** இந்நோய் கண்கள் (உறுத்தல், சிவத்தல்) நுரையீரல் நோய், நுரையீரல் சவ்வின் சுழற்சி மற்றும் நீர் சேர்த்தல், இருதயம், சிறு நீரகம், இரத்த நாளங்கள், நரம்புகள் போன்ற உறுப்புகளை பாதிக்கும்.	விவரித்தல்	கவனித்தல்	மின்னல் அட்டை	

வ. எண்	நேரம்	குறிப்பான நோக்கங்கள்	பொருளடக்கம்	ஆராய்ச்சியாளர் செயல்	மாணவர்கள் செயல்கள்	ஒலி, ஒளி சார் உபகரணங்கள்	மதிப்பீடு
7.	25 நிமி	முடக்குவாத மூட்டு அழற்சியின் மருத்துவ முறைகள் என்ன?	**முடக்குவாத மூட்டு அழற்சியின் மருத்துவ முறைகள்** • நோயின் தீவிரத் தன்மையை பொறுத்து NSAID மற்றும் DMARD போன்ற மருந்துகளோடு உடற்பயிற்சி மேற்கொள்ள வேண்டும். • முடக்குவாதம் நோயை கட்டுப்படுத்துதல் மற்றும் மாற்றி அமைக்கும் மருந்துகள் (DMRD) இந்த பிரிவில் உள்ள மருத்துவர்களால் முடக்குவாதத்திற்கு கொடுக்கப்படுகிறது. இவற்றை மருத்துவர் பரிந்துரைப்படி மட்டுமே சாப்பிட வேண்டும். **மருந்துகள் தவிர முடக்குவாதத்தை கட்டுப்படுத்த வேறு என்ன செய்யலாம்.** • ஹாட்பேக்- சூடான ஒத்தடம் தரலாம்: 10-20 நிமிடங்கள் செய்யலாம்- இது வலியைக் குறைக்க உதவுகிறது. • இதனை மூட்டின் மேல் எந்த பாதிப்பு இன்றி இருந்தால் மட்டும் செய்ய வேண்டும்.	விவரித்தல்	கவனித்தல்	மின்னல் அட்டை	

வ. எண்	நேரம்	குறிப்பான நோக்கங்கள்	பொருளடக்கம்	ஆராய்ச்சியாளர் செயல்	மாணவர்கள் செயல்கள்	ஒலி, ஒளி சார் உபகரணங்கள்	மதிப்பீடு
			• சூடு/ குளிர் தெரியாத நோய்கள் பாதிக்கப்பட்டு இருப்பவர்கள் இதனை தவிர்த்தல் வேண்டும். **2. கோல்ட் பேக்- குளிர் நீர் ஒத்தடம்** குளிர் ஒத்தடம்- 20 நிமிடங்கள் மூட்டின் மேல் தரலாம். இதுவும் இரத்தக் குழாய்களை சுருங்கி விரிவடையச் செய்து வலி வீக்கத்தை குறைக்கிறது. **3. உணவு முறைகள்** குறிப்பாக இந்நோய்க்கு இந்த உணவை சாப்பிடுங்கள் என்று எதுவும் இல்லை. நல்ல சமச்சீரான உணவு முக்கியமாக மீன் உணவில் உள்ள ஒமேகா-3 என்கின்ற நல்ல கொழுப்பு அமிலம் எடுத்துக்கொள்ள வேண்டும். உடல் எடை கூடாமல் பாதுகாத்துக்கொள்ள வேண்டும். அதிகமான காய்கறிகள், பழங்கள் எடுத்துக்கொள்ளலாம். **4. உடற்பயிற்சி** முடக்குவாத நோயாளிக்கு சரியான உடற்பயிற்சி அவசியம்.				

வ. எண்	நேரம்	குறிப்பான நோக்கங்கள்	பொருளடக்கம்	ஆராய்ச்சியாளர் செயல்	மாணவர்கள் செயல்கள்	ஒலி, ஒளி சார் உபகரணங்கள்	மதிப்பீடு
			குறிப்பிட்ட அளவிலான அசைவு, வலு மற்றும் திறன் சேர்க்கும் உடற்பயிற்சி அவசியம் (மிதமான நடைபயிற்சி, நீச்சல், மிதிவண்டி ஓட்டுவது). **மூட்டு பாதுகாப்பு விஷயங்கள்** ஸ்பிலின்ட் என்கிற மூட்டு பாதுகாப்பு கவசங்களை பயன்படுத்தலாம். இதுவும் வலி வீக்கத்தை வெகுவாக குறைக்கும். இதில் நிறைய வகைகள் இருக்கிறது. மருத்துவரின் ஆலோசனைப்படி நமக்கு எது அதிக பலன் தருமோ அதை பயன்படுத்தலாம். சில மூட்டு கவசங்களை ஓய்வில் இருக்கும்போது பயன்படுத்தலாம். சில மூட்டு கவசங்களை வேலை செய்யும்போது பயன்படுத்தலாம். சிலவற்றை ஒழுங்கற்ற மூட்டை சரிசெய்வதற்கு பயன்படுத்தலாம். • நீண்ட நேரம் ஒரே நிலையில் அமர்ந்திருக்காதீர்கள் • மாடிபடி ஏறி கைத்தடி பயன்படுத்துங்கள் • சரியான தட்டையான காலணிகளை பயன்படுத்துங்கள்				

வ. எண்	நேரம்	குறிப்பான நோக்கங்கள்	பொருளடக்கம்	ஆராய்ச்சியாளர் செயல்	மாணவர்கள் செயல்கள்	ஒலி, ஒளி சார் உபகரணங்கள்	மதிப்பீடு
			• மேற்கத்திய வகை கழிவறையை பயன்படுத்துங்கள் • தரையில் உட்காராமல் நாற்காலிகளில் அமருங்கள். • மூட்டு கோணல் ஏற்படுவதை தவிர்த்துக்கொள்ள வேண்டி கால் மூட்டுக்கு தலையணை வைக்க வேண்டாம். **6. மன அழுத்தம் குறைப்பு** இசை, பாட்டு நண்பர்களுடன் பேச்சு, தொலைகாட்சி, நல்ல தூக்கம் என எது மன அழுத்தத்தை குறைக்க உதவுகிறதோ அதை செய்யுங்கள். **7. தாம்பத்தியம்** தாம்பத்திய உறவை உங்கள் மூட்டு வலிக்கு ஏற்ப அமைத்துக்கொள்ளலாம். உறவுக்கு முன்பு ஹாட்பேக் மூட்டுகளில் பயன்படுத்தலாம். வலி மருந்துகள் உங்கள் தாம்பத்திய நேரத்தில் முழுமையாக பலன் அளிக்குமாறு சாப்பிடலாம். தாம்பத்தியத்தால் உடலில் இயற்கையான வேதிப் பொருட்கள் உருவாகி மூட்டு அழற்சியை வெகுவாக குறைக்க உதவுகிறது.				

முடிவுரை

பொதுவாக இந்நோய் எல்லா மக்களையும் பாதிக்கின்றது என்று இப்போது தெரிந்துகொண்டோம். ஆகையால் முடக்குவாத மூட்டு அழற்சி மூட்டுகளில் எப்படி பாதிப்பை ஏற்படுத்துகின்றது, முடக்குவாத மூட்டு அழற்சி நோயின் அறிகுறிகள் என்ன, முடக்குவாத மூட்டு அழற்சி நோய் எவ்வாறு கண்டறியப்படுகிறது, முடக்குவாத மூட்டு அழற்சியின் பக்கவிளைவுகள் என்ன, முடக்குவாத மூட்டு அழற்சியின் மருத்துவ முறைகள் என்ன என்பதை நன்கு அறிந்து அந்நோயிலிருந்து நம்மை பாதுகாத்துக்கொள்ள வேண்டும். இதனால் நமது தினசரி வாழ்க்கைமுறையை நன்கு வாழ வழிவகுக்கும்.

PATIENT CONSENT FORM

TITLE : A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING REHABILITATION AMONG PATIENTS WITH RHEUMATOID ARTHRITIS IN RHUEMATOLOGY WARD AT RAJIV GANDHI GOVERNMENT GENERAL HOSPITAL, CHENNAI-03.

Name of Participant	**:**
Date	**:**
Age/sex	**:**
Name of the Principal Investigator	**:** V.MUTHULAKSHMI
Name of the institution	**:** Rajiv Gandhi Government General Hospital Chennai - 03.
Enrollment No	**:**
Documentation of the informed consent	**:** (legal representative can sign if the participant is minor or competent).

I _____have read/it has been read for me, the information in this form. I was free to ask any questions and they have been answered. I am over 18 years of age and exercising my free power of choice, hereby give my consent to be included as a participant in the study.

- I have read and understood this consent form and the information provided to me.
- I have had the consent document explained in detail to me.
- I have been explained about the nature of my study.
- My rights and responsibilities have been explained to me by the investigator

- I am aware of the fact that I can opt out of the study at any time without having to give any reason and this will not affect my future treatment in this hospital.
- I hereby give permission to the investigators to release the information obtained from me as a result of participation in this study to the regulatory authorities, government agencies and Institutional ethics committee. I understand that they are publicly presented.
- My identity will be kept confidential if my data are publicly presented.
- I have had my questions answered to my satisfaction
- I am aware that I have any question during this study; I should contact the concerned investigator. By signing this consent form I attest that the information given in this document has been clearly explained to me and understood by me . I will be given a copy of this consent form.

1. **Name and signature / thump impression of the participant(or legal representative if participant in competent)**

   Name **:**_____ Signature:_____

   Date: _____

2. **Name and signature of impartial witness (required for illiterate patients)**

   Name **:**_____ Signature:_____

   Date: _____

3. **Name and signature of the Investigator or her representative obtaining consent:**

   Name **:**_____ Signature:_____

   Date: _____

INFORMATION TO PARTICIPANTS

TITLE : A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING REHABILITATION AMONG PATIENTS WITH RHEUMATOID ARTHRITIS IN RHUEMATOLOGY WARD AT RAJIV GANDHI GOVERNMENT GENERAL HOSPITAL, CHENNAI-03.

Name of the Participant :

Date :

Age/sex :

Investigator : V.MUTHULAKSHMI

Name of the institution : Rajiv Gandhi Government General Hospital Chennai - 03.

Enrolment No :

You are invited to take part in this study. The information in this document is meant to help you decide whether or not to take part. Please feel free to ask if you have any queries or concerns.

You are being asked to Cooperative in this study being conducted in selected Rajiv Gandhi Government General Hospital at Chennai.

What is the Purpose of the Research (explain)

This research is conducted a study to assess the effectiveness of structured teaching programme on knowledge regarding rehabilitation among patients with rheumatoid arthritis in Rheumatology ward at Rajiv Gandhi Government General Hospital, chennai-03. We obtained permission from the institutional ethics committee.

Study Procedures

- Study will be conducted after approval of ethics committee
- A written formal permission will be obtained from authorities of Rajiv Gandhi government general hospital, Chennai to conduct study.
- The purpose of study will be explained to the participants.
- The investigator will obtain informed consent.
- The investigator will assess the knowledge level of each participant before the structured teaching programme by using a structured questionnaire.
- The procedure of will be explained to them with the help of planned teaching programme
- Following that the level of knowledge will be assessed after planned teaching programme

Possible benefits to other people

The result of the research may provide benefits to the early detection and prevention of breast cancer and also empathetic care to them by investigator.

Confidentiality of the information obtained from you

You have the right to confidentiality regarding the privacy of your personal details. The information from this study, if published in scientific journals or presented at scientific meetings, will not reveal your identity.

How will your decision not to participate in the study affect you?

Your decisions not to participate in this research study will not affect your activity of daily living, medical care or your relationship with investigator or the institution.

Can you decide to stop participating in the study once you start?

The participation in this research is purely voluntary and you have the right to withdraw from this study at any time during course of the study without giving any reasons.

Your Privacy in the research will be maintained throughout study. In the event of any publications or presentation resulting from the research, no personally identifiable information will be shared.

Signature of Investigator

Date

Signature of participants

Date

ஆராய்ச்சி தகவல் தாள்

ஆராய்ச்சியின் தலைப்பு :

முறையான நலக்கல்வி மூலம் முடக்குவாத நோயாளிகளின் மறுவாழ்வு பற்றிய கற்றுத்தந்த கல்வியின் அறிவுதிறன் மேம்பாடு பற்றிய ஆய்வு.

பங்கேற்பாளர் பெயர் :

ஆய்வாளர் பெயர் : வீ.முத்துலட்சுமி

ஆய்வு நடைபெறும் இடம் : இராஜிவ் காந்தி அரசு பொது மருத்துவமனை

மருத்துவ உள் நோயாளிகள் பிரிவு,

சென்னை -03.

_____ என்பவராகிய நான் இந்த ஆய்வின் விவரங்களையும் அதன் நோக்கங்களையும் முழுமையாக அறிந்து கொண்டேன். எனது சந்தேகங்கள் அனைத்திற்கும் தகுந்த விளக்கம் அளிக்கப்பட்டது.இந்த ஆய்வில் முழு சுதந்திரத்துடன் மற்றும் சுயநினைவுடன் பங்கு கொள்ள சம்மதிக்கிறேன்.

1.நான் இந்த ஒப்புதல் தகவல் தாள் படித்து புரிந்து கொண்டேன்.

2.இச்சுய ஒப்புதல் படிவத்தை பற்றி எனக்கு விளக்கப்பட்டது.

3.எனக்கு விளக்கப்பட்ட விஷயங்களை நான் புரிந்து கொண்டேன்.நான் எனது சம்மதத்தை தெரிவிக்கிறேன்.

4.இந்த ஆய்வினை பற்றிய அனைத்து தகவல்களும் எனக்கு தெரிவிக்கப்பட்டது.

5.இந்த ஆய்வில் ஏற்படும் பாதிப்புகள் பற்றி எனக்கு விளக்கம் அளிக்கப்பட்டது.

6..நான் ஆய்வாளருக்கு முழு ஒத்துழைப்பு அளிப்பேன்,மேலும்,எனக்கு பக்கவிளைவு ஏதாவது ஏற்பட்டால் ஆய்வாளருக்கு உடனடியாக தெரிவிப்பேன்

இந்த ஆய்வில் பிறரின் நிர்பந்தமின்றி என் சொந்த விருப்பத்தின் பேரில் நான் பங்கு பெறுவேன். மற்றும் நான் இந்த ஆராய்ச்சியிலிருந்து எந்த நேரமும் பின் வாங்கலாம் என்பதையும் நான்புரிந்து கொண்டேன் .

இந்த ஆய்வில் கலந்து கொள்வதின் மூலம் என்னிடம் பெறப்படும் தகவலை ஆய்வாளர் இன்ஸ்டிட்யூசனல் எத்திக்ஸ் கமிட்டியினரிடமோ ,அரசு நிறுவனத்திடமோ தேவைப்பட்டால் பகிர்ந்து கொள்ளலாம் என சம்மதிக்கிறேன்.

இந்த ஆய்வின் முடிவுகளை வெளியிடும்போது எனது பெயரோ,அடையாளங்களோ வெளியிடப்படாது என அறிந்து கொண்டேன்.

இந்த ஆய்வில் பங்கேற்கும்போது ஏதேனும் சந்தேகம் ஏற்பட்டால் உடனே ஆய்வாளரை தொடர்பு கொள்ள வேண்டும் என அறிந்து கொண்டேன்.

இந்த ஆராய்ச்சி தகவல் தாளில் கையழுத்திடுவதின் மூலம் இதிலுள்ளஅனைத்து விஷயங்களும் எனக்கு தெளிவாக விளக்கப்பட்டது என்று தெரிவிக்கிறேன் மற்றும் ஆராய்ச்சியையும் புரிந்துகொண்டேன்.இந்த ஒப்புதல் படிவத்தின் நகல் எனக்கு கொடுக்கப்படும் என்று தெரிந்துகொண்டேன்.

ஆய்வினால் ஏற்படும் நன்மைகள்

இந்த ஆய்வில் கலந்து கொள்வதின் மூலம் நீங்கள் மூடக்குவாத மூட்டு அழற்சியின் விளைவுகள் மற்றும் அதன் மறுவாழ்விற்க்கான வழிமுறைகளைஅறிந்து அதன்மூலம் பயன் பெற உதவியாக இருக்கும்.

இந்த ஆய்வில் பங்கேற்றாலும் நீங்கள் வழக்கமான சிகிச்சையை தொடர்ந்து பெறலாம்.

ஆய்வாளர் கையொப்பம் பங்கேற்பாளர் கையொப்பம்

தேதி தேதி

ஆராய்ச்சி ஒப்புதல் கடிதம்

ஆராய்ச்சியின் தலைப்பு :

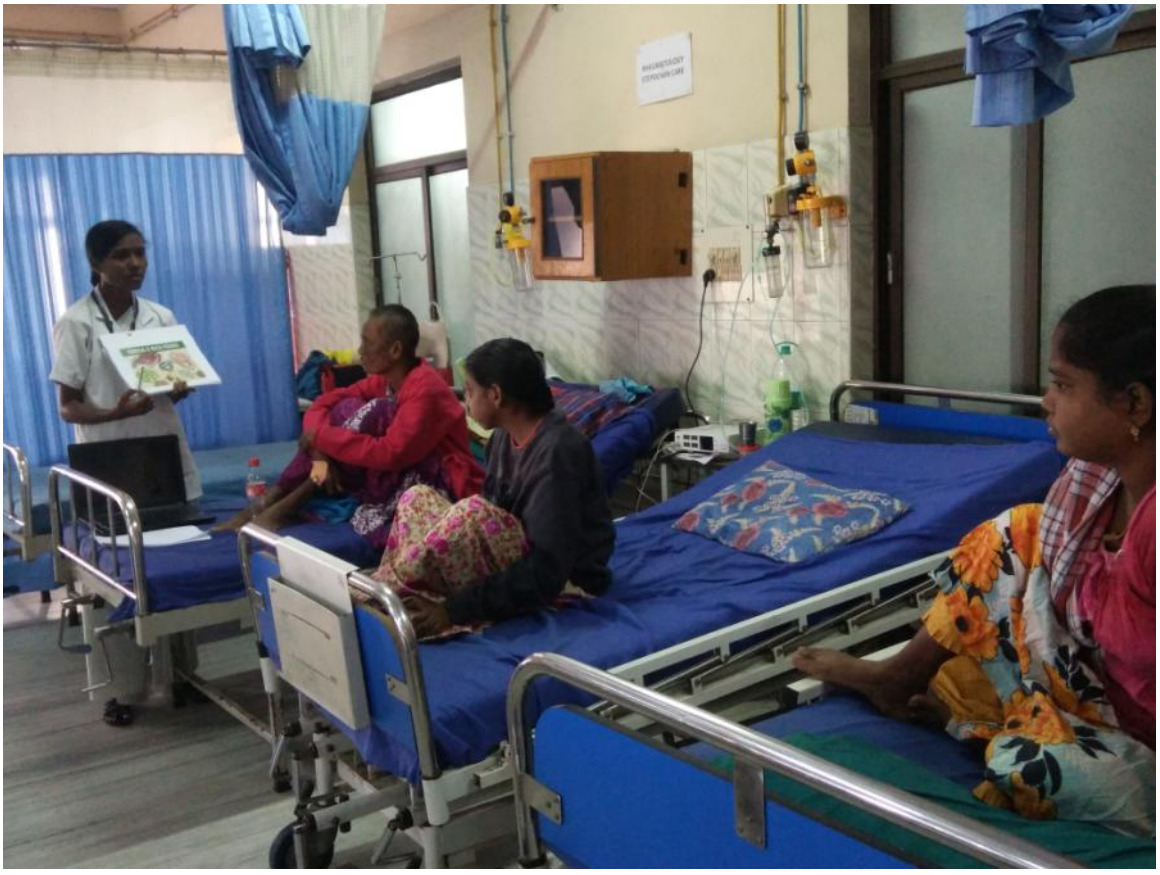
முறையான நலக்கல்வி மூலம் முடக்குவாத நோயாளிகளின் மறுவாழ்வு பற்றிய கற்றுத்தந்த கல்வியின் அறிவுதிறன் மேம்பாடு பற்றிய ஆய்வு.

ஆய்வாளர் பெயர் : வீ.முத்துலட்சுமி
பங்கேற்பாளர் பெயர் :
தேதி :
வயது/பால் :

- ✓ ஆய்வாளர் மேற்கொள்ளும் ஆராய்ச்சியில் பங்கேற்க யாருடைய கட்டாயமுமின்றி முழுமனதுடனும் சுயநினைவுடனும் சம்மதிக்கிறேன்
- ✓ ஆய்வாளர் மேற்கொள்ளப்போகும் பரிசோதனைகளை மிக தெளிவாக விளக்கிக்கூறினார்.
- ✓ எனக்கு விருப்பமிலாத பட்சத்தில் ஆராய்ச்சியிலிருந்து எந்நேரமும் விலகலாம் என்பதையும் ஆய்வாளர் மூலம் அறிந்து கொண்டேன்.
- ✓ இந்தஆராய்ச்சி ஒப்புதல் கடிதத்தில் உள்ள விவரங்களை நன்கு புரிந்து கொண்டேன்.எனது உரிமைகள் மற்றும் கடமைகள் ஆராய்ச்சியாளர் மூலம் விளக்கப்பட்டது.
- ✓ நான் ஆராய்ச்சியாளருடன் ஒத்துழைக்க சம்மதிக்கிறேன். எனக்கு ஏதேனும் உடல்நலக்குறைவு ஏற்பட்டால் ஆராய்ச்சியாளரிடம் தெரிவிப்பேன்.
- ✓ நான் வேறு எந்த ஆராய்ச்சியிலும் தற்சமயம் இடம்பெறவில்லை என்பதை தெரிவித்து கொள்கிறேன்.
- ✓ இந்தஆராய்ச்சியின் தகவல்களை வெளியிட சம்மதிக்கிறேன்.அப்படி வெளியிடும் போது என் அடையாளம் வெளிவராது என்பதை அறிவேன்.
- ✓ எனக்கு இந்த ஒப்புதல் கடிதத்தின்நகல் கொடுக்கப்பட்டது.

ஆய்வாளர்கையொப்பம் பங்கேற்பாளர்கையொப்பம்

தேதி தேதி



“மூட்டு அழற்சி பற்றிய விழிப்புணர்வு கையேடு”

நலக்கல்வி வழங்குபவர்

வீ. முத்துலட்சுமி

முதுநிலை செவிலிய மாணவி 2ம் ஆண்டு

செவிலியர் கல்லூரி, சென்னை மருத்துவக் கல்லூரி.

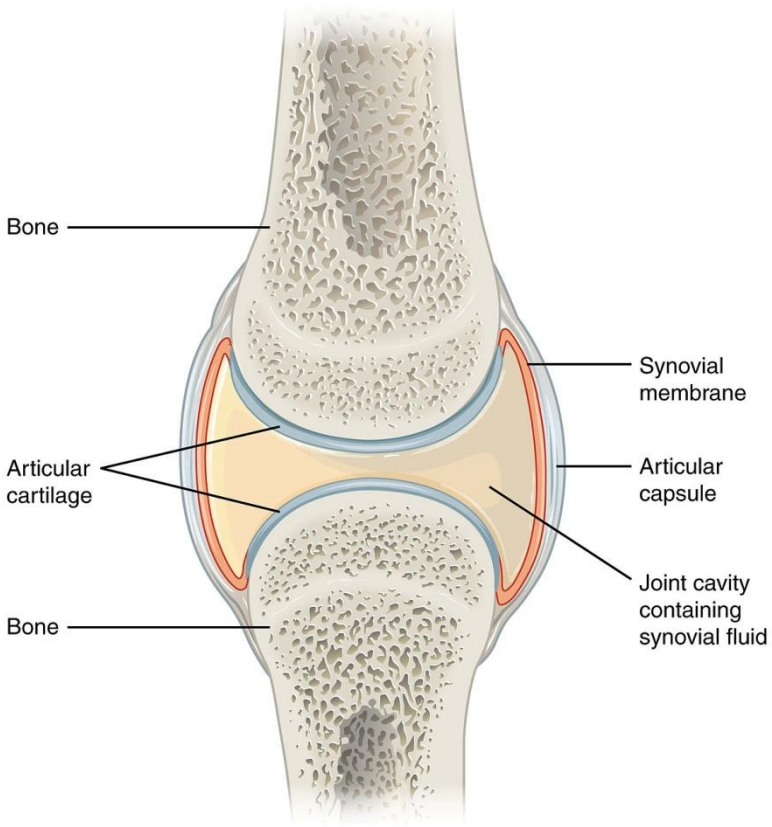
சென்னை - 600 003.

மூட்டு அழற்சி - புணர் நிர்மாணம் (விழிப்புணர்வு)

முன்னுரை :

- நம்முடைய மூட்டுகளை பாதிக்கின்ற பல்வேறு பிரச்சனைகளில் முக்கியமான ஒன்று இந்த முடக்கு வாதம் என்கிற ருமட்டாய்ட் ஆர்த்ரைடிஸ். நாம் இந்த நோயை பற்றி எளிமையாகப் புரிந்து கொள்ள முயற்ச்சிப்போம்.

மூட்டு என்பது என்ன ? நம்முடைய உடலில் இரண்டு அல்லது அதற்கு மேற்பட்ட எலும்புகள் சேரும் இடத்தை மூட்டு என்கிறோம்.



முடக்கு வாத மூட்டு அழற்சி என்றால் என்ன ?

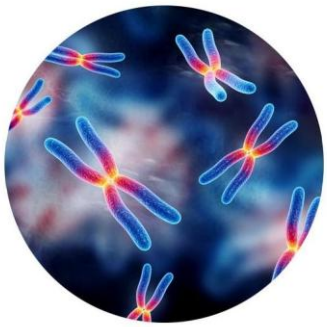
- மூட்டுக்குள் உள்ள இணைப்புத் திசுக்கள் இடம் மாறுவதாலும்
- மூட்டு சவ்வு வீக்கம் அடைவதாலும்.
- மூட்டு நீர் அதிகமாவதாலும் இதனை முடக்குவாத மூட்டு அழற்சி என்கின்றோம்.
- இது முக்கியமாக உடலில் உள்ள சிறு மூட்டுகள் மற்றும் பெறு மூட்டுகளை பாதிக்கும்.

யாரை அதிகமாக பாதிக்கும் ?

- இந்நோய் பெரும்பாலும் பெண்களையே பாதிக்கும்.
- 20ல் இருந்து 40து வயதான மக்கள் பெரும்பாலும் பாதிக்கப்படுவார்.
- ஆண்களும் வயதானோரும் கூட பாதிக்கப்படலாம்.

இந்நோய் எதனால் ஏற்படுகிறது ?

- காரணம் கண்டறிய படவில்லை
- பெரும்பாலும் மரப்பணு மாற்றங்கள் முக்கிய காரணம்
- சில எதிர்வினை நோய் தாக்குதலின் காரணம்
- உடல் மற்றும் மனரீதியான காரணம்
- புகைப் பிடித்தல்



இந்த நோயின் அறிகுறிகள் என்ன ?

மூட்டுவலி - முக்கியமாக சிறுமூட்டுக்கள் வீங்கும் மணிக்கட்டுகள், முழங்கைகள், முழங்கால் மூட்டு மற்றும் கணுக்கால் மூட்டுக்கள் வீங்கும் மற்றும் வலி ஏற்படும் இது ஆறுவாரங்களுக்கு மேல் நீடிக்கும். காலை எழுந்துவுடன் கைகளில் ஒரு இறுக்கத்தன்மை இருக்கும் இது அரைமணி நேரம் தாண்டி நீடிக்கலாம்.

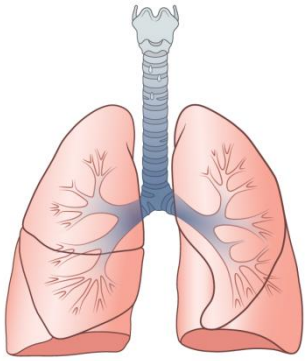
மூட்டு அழற்சியை எவ்வாறு கண்டுபிடிப்பது ?

- உடல் பரிசோதனையின் மூலம் கண்டறியலாம்
- இது தவிர நோய் தொற்று ஏற்பட்டதை தெரிவிக்கிற மாதிரி CRP/ESR என்கின்ற இரண்டு பரிசோதனைகள் உதவுகின்றது.
- எக்ஸ்ரே, அல்ற்றாசவுண்ட் சிடி எம்.ஆர்.ஐ போன்ற கருவிகள் மூலம் இந்நோயை கண்டறியலாம்.

இந்நோய் வேறு எந்த உறுப்புகளை பாதிக்கும் ?

- இந்நோய் கண்கள் (உறுத்தல், சிவத்தல்) துறையீரல் இடைத்திசு நுரையீரல் நோய், நுரையிரல் சவ்வின் சுழற்சி மற்றும் நீர் சேர்த்தல், இருதயம், சீறு நீரகம், இரத்த நாளங்கள் நரம்புகள் போன்ற உறுப்புகளையும் பாதிக்கும்.





இந்நோய்குரிய மருத்துவ முறைகள் என்ன ?

- நோயின் தீவிரத்தன்மையை பொறுத்து NSAID மற்றும் DMARD போன்ற மருந்துகளோடு உடற்பயிற்ச்சி மேற்கொள்ள வேண்டும்.

- முடக்குவாதம் நோயை கட்டுப்படுத்துதல் மற்றும் மாற்றி அமைக்கும் மருந்துகள் (DMRD) இந்த பிரிவில் உள்ள மருத்துவர்களால் முடக்கு வாதத்திற்கு கொடுக்கபடுகிறது இவற்றை மருத்துவர் பரிந்துரைப்படி மட்டுமே சாப்பிட வேண்டும்.

மருந்துகள் தவிர முடக்கு வாதத்தை கட்டுப்படுத்த வேறு என்ன செய்யலாம்:

1.ஹாட் பேக் - சூடான ஒத்தடம் தரலாம் : 10 - 20 நிமிடங்கள் செய்யலாம் - இது வலியை குறைக்க உதவுகிறது.

- இதனை மூட்டின் மேல் எந்த பாதிப்பு இன்றி இருந்தால் மட்டும் செய்ய வேண்டும்.
- சூடு / குளிர் தெரியாத நோய்கள் பாதிக்கப்பட்டுஇருப்பவர்கள் இதனை தவிர்தல் வேண்டும்.

2. கோல்ட் பேக் - குளிர் நீர் ஒத்தடம் :

குளிர் ஒத்தடம் : 20 நிமிடங்கள் மூட்டின் மேல் தரலாம் இதுவும் இரத்தக் குழாய்களை சுருங்கி விறிவடையச் செய்து வலி வீக்கத்தை குறைக்கிறது.

3) உணவு முறைகள் :

குறிப்பாக இந்நோய்க்கு இந்த உணவை சாப்பிடுங்கள் என்று எதும் இல்லை. நல்ல சமச்சீரான உணவு முக்கியமாக மீன் உணவில் உள்ள ஒமேக -3 என்கின்ற நல்ல கொழுப்பு அமிலம். எடுத்துகொள்ள வேண்டும்.

உடல் எடை கூடாமல் பர்த்துக்கொள்ள வேண்டும் அதிகமான காய்கறிகள், பழங்கள் எடுத்துக் கொள்ளலாம்.

4. உடற்பயிற்சி

- முடக்கு வாத நோயாளிக்கு சரியான உடற்பயிற்சி அவசியம் .
- குறிப்பிட்ட அளவிலான அசைவு, வலு மற்றும் திறன் சேர்க்கும் உடற்பயிற்சி அவசியம் (மிதமான நடைப்பயிற்சி, நீச்சல், மிதிவண்டி ஒட்டுவது).

5. மூட்டு பாதுகாப்பு விஷயங்கள் :

ஸிபிலின்ட் என்கிற மூட்டு பாதுகாப்பு கவசங்களை பயன்படுத்தலாம். இதுவும் வலி வீக்கத்தை வெகுகாக குறைக்கும் இதில் நிறைய வகைகள் கிடைக்கிறது. மருத்துவரின் ஆலோசனைப் படி நமக்கு எது அதிக பலன் தருமோ அதை பயன்படுத்தலாம்.

சில மூட்டு கவசங்களை ஓய்வில் இருக்கும் போது பயன்படுத்தலாம். சில மூட்டு கவசங்களை வேலை செய்யும் போது பயன்படுத்தலாம் சிலவற்றை ஒழுங்கற்ற மூட்டை சரிசெய்வதற்கு பயன்படுத்தாலாம்.

- நீண்ட நேரம் ஒரே நிலையில் அமர்ந்திருக்காதீர்கள்
- மாடிபடி ஏற கைத்தடி பய்ன்படுத்துங்கள்
- சரியான தட்டையான காலணிகளை பயன்படுத்துங்கள்
- மேறகத்திய வகை கழிவறையை பயன்படுத்துங்கள்.
- தரையில் உட்காராமல் நாற்காலிகளில் அமருங்கள்
- மூட்டு கோணல் ஏற்படுவதை தவிர்த்துகொள்ள வேண்டி கால் மூட்டுக்கு தலையாணை வைக்க வேண்டாம்.

6. மன அழுத்தம் குறைப்பு :

இசை, பாட்டு நண்பர்களுடன் பேச்சு, தொலைக்காட்சி, நல்ல தூக்கம் என எது மன அழுத்தத்தை குறைக்க உதவுகிறதோ அதைச் செய்யுங்கள்.

7. தாம்பதியம்: தாம்பதிய உறவை உங்கள் மூட்டு வலிக்கு ஏற்ப அமைத்துக் கொள்ளலாம் உறவுக்கு முன்பு “ஹாட் பேக்” மூட்டுகளில் பயன்படுத்தலாம் வலி மருந்துகள் உங்கள் தாம்பதிய நேரத்தில் முழுமையாக பலன் அளிக்குமாறு சாப்பிடலாம், தாம்பத்தியால் உடலில் இயற்க்கையான வேதிபொருட்கள் உருவாகி மூட்டு அழற்சியை வெகுவாக குறைக்க உதவுகிறது.

முடக்கு வாதத்தை முடக்கு தாண்டு..... ...தடை தாண்டு

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- ☑ இயன்முறை வைத்தியர் சொல்லிக்கொடுத்த பயிற்சியை காலை, மாலை இருவேளை தவறாமல் செய்யவும்.
- ☑ காலை, மாலை இருவேளையும் சுடு தண்ணீர் ஒத்தடம் அல்லது தவிடு ஒத்தடம் கொடுக்கவும்.
- ☑ மருத்துவர், சிறப்பு மருத்துவர் பரிந்துரைத்த மாத்திரைகளைத் தவிர வேறு மாத்திரைகளை உட்கொள்ளக்கூடாது.
- ☑ மருத்துவரிடம் குறிப்பிட்ட இடைவேளையுடன் ஆலோசனைப் பெறுவதை உறுதி செய்து கொள்ளுங்கள்.
- ☑ மாடிப்படி ஏறி இறங்கும்போது கைப்பிடி சுவரை உபயோகப்படுத்துவதை முறையாக்கிக் கொள்ளவும்.
- ☑ குத்துக்கால் இடும்போது ஏதாவது ஒரு பிடிப்பு கைகளிலிருப்பதை உறுதி செய்து கொள்ளவும்.
- ☑ முடிந்தவரை மேலைநாட்டு முறையிலுள்ள கழிவறைகளை உபயோக்கப்படுத்தவும்.
- ☑ தவறி, இடறி கீழே விழுந்து மூட்டு அடிபடுவதை தவிர்க்க வீட்டில் எப்போதும் வெளிச்சம் இருப்பதை உறுதி செய்து கொள்ளவும்.
- ☑ சுண்ணாம்புச்சத்து உள்ள உணவு வகைகளை சாப்பிடுவதை உறுதி செய்து கொள்ளவும்.
- ☑ கைத்தடி மற்றும் நடப்பதற்கான உபகரணங்களை தேவையானபோது தவறாமல் பயன்படுத்தவும.
- ☑ காலணி மற்றும் அதைச் சார்ந்த உபகரணங்களில் தேவையான மாற்றங்களை மருத்துவரின் ஆலோசனைப் பெற்று சரி செய்து கொள்ளவும்.
- ☑ அன்றாடம் உபயோகிக்கக்கூடிய ஆடைகளால் மூட்டின் அசைவு எந்த வகையிலும் பாதிக்காத வண்ணம் பார்த்துக்கொள்ளவும்.
- ☑ அதிக உயரமுள்ள காலணிகளை தவிர்க்கவும்.

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- ☒ பயிற்சி முறைகளை தேவைக்கு அதிகமாக செய்து துன்புற வேண்டாம்.
- ☒ அதிக நேரம் நிற்பதை தவிர்க்கவும்.
- ☒ அதிக தூரம் நடப்பதை தவிர்க்கவும்
- ☒ கைப்பிடி உதவியில்லாமல் குத்துக்காலிடுவதை தவிர்க்கவும்.
- ☒ தரையில் அமர்ந்து செய்யக்கூடிய காரியங்களை தவிர்க்கவும்.

☒ தேவையில்லாமல் கால்கள் மற்றும் தசைகளில் செய்யக்கூடாத மசாஜ் முறைகளை தவிர்க்கவும்

☒ குழந்தைகளை மூட்டு மிதிக்க அனுமதிக்காதீர்கள்

☒ மாடிப்படிகளில் ஏறும் போதும் இறங்கும்போதும் கைப்பிடி சுவரை தவிர்க்காதீர்கள்.

☒ பாரம் சுமக்க வேண்டாம்.

☒ கிழிந்த நஞ்சுபோன காலணிகளை தவிர்க்கவும்.

☒ சம்மணம் போட்டு உட்காருவதை தவிர்க்கவும்.

☒ களிம்புகள் மற்றும் தேவையற்ற எண்ணெய் பூசுவதை தவிர்க்கவும்.

☒ வழுக்கக்கூடிய தரையினை தவிர்க்கவும.

☒ முடிந்தவரை இந்தியமுறை கழிவறையை தவிர்க்கவும்.

மூட்டு அழற்சி நோய் பற்றிய விழிப்புணர்வு

நோயாளிகள்

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